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ACIDIC PRECIPITATION IN ONTARIO STUDY

ANNUAL STATISTICS OF CONCENTRATION AND DEPOSITION - CUMULATIVE PRECIPITATION MONITORING NETWORK, 1986

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APIOS-007-88

JUNE 1988

Ontario
Ministry of the Environment

Jim Bradley
Minister

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PART I

INTRODUCTION

INTRODUCTION

This report was prepared by Diane Green. The statistical summaries presented in this report pertain to the 1986 analytical results obtained from the Acidic Precipitation in Ontario Study (APIOS) cumulative precipitation monitoring network. The relevant data can be obtained on request from the Air Resources Branch of The Ontario Ministry of the Environment. All available data are utilized in the calculations except results reported as being unreliable (i.e., results are identified as unreasonable values by using the validation procedures; detailed description of the validation procedures is available from the Ministry upon request) or approximate (i.e., inexact results are reported due to laboratory difficulties, such as may be encountered in calibration, or when the sample cannot be re-analyzed to confirm the reported value). In a very few cases, concentration levels exceeded the upper limit of the range of the chemical analysis. Rather than using the upper limit, a decision was made to exclude these values from the statistics generated in this report. Reported results for metals which have missing leachate analysis are also excluded from statistical analysis. Results labelled as <W are replaced by "zero". W is the level which the analytical technique cannot distinguish from zero. Prior to 1986, if a level was recorded less than the detection limit T, a value corresponding to one half the detection limit was utilized for statistical calculations as reported in the statistical summaries. These values are no longer halved. Note that T is normally about ten times W, and values above the T criteria are considered to be precise and accurate.

The reported cumulative precipitation gauge depth (or an interpolated value from Environment Canada's CLIMAT data) is utilized in the calculation of deposition. If a precipitation gauge value is not available, then the collected sample volume is converted to its equivalent precipitation depth and is used in the deposition calculation.

The statistical summaries presented in Parts III to VI include number of samples, mean (arithmetic/geometric), standard deviation (arithmetic/geometric), maximum, minimum, quartiles and precipitation weighted means using precipitation gauge depths where appropriate. These statistics are for an average sampling period. Data which correspond to irregular sampling periods are either combined if they are from consecutive collection periods which span 28d $\pm$ 5d, or deleted, before the statistics are generated.

INTRODUCTION

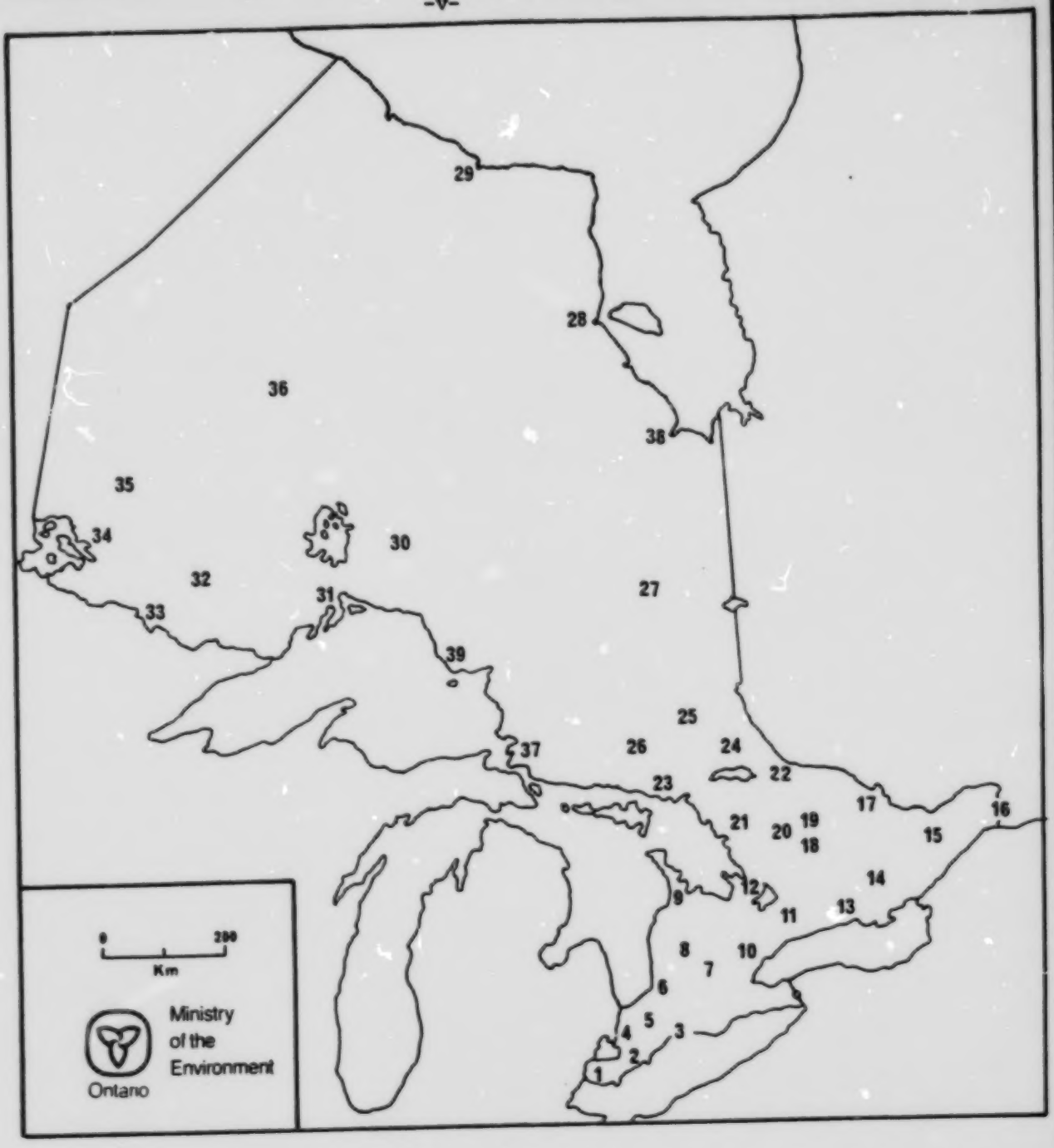
Le présent rapport a été préparé par Diane Green; il renferme les statistiques de 1986 tirées du réseau de surveillance des précipitations totales, réseau créé dans le cadre de l'Étude sur les précipitations acides en Ontario (APIOS). On peut obtenir les données pertinentes auprès de la Direction des ressources atmosphériques du ministère de l'Environnement. Toutes les données à notre disposition ont été utilisées dans les calculs, sauf celles jugées non fiables (c'est-à-dire les résultats qui, après vérification de leur validité, ont été signalés comme des valeurs excessives. On peut obtenir sur demande une description détaillée des procédés employés.) ou approximatives (c'est-à-dire les résultats qui, à cause de difficultés éprouvées en laboratoire, à la calibration, par exemple, ou lorsqu'il était impossible d'analyser à nouveau un échantillon pour confirmer la valeur indiquée, sont considérés comme inexacts). Dans quelques cas, les concentrations dépassaient le seuil supérieur fixé pour les analyses chimiques. Plutôt que d'utiliser le seuil supérieur, on a décidé d'exclure ces valeurs du présent rapport. De même pour les métaux dont les résultats d'analyse de lixiviation sont incomplets. Les résultats étiquetés <W sont remplacés par « zéro ». Dans le cadre d'une analyse technique, W correspond au niveau qu'il est impossible de distinguer du zéro. Avant 1986, si on mesurait un niveau inférieur au seuil de détection T, on utilisait aux fins d'analyse statistique une valeur correspondant à la moitié du seuil de détection, comme on l'indique d'ailleurs dans la présente étude. Ces valeurs ne sont plus coupées de moitié. Signalons que, normalement, T est environ dix fois supérieur à W et que les valeurs supérieures au seuil de détection T sont considérées comme justes et précises.

La hauteur totale des précipitations obtenue à l'aide du pluviomètre (ou une valeur interpolée obtenue à partir des données CLIMAT d'Environnement Canada), sert au calcul des dépôts. Si on ne peut obtenir de données à partir du pluviomètre, on convertira le volume de l'échantillon en hauteur des précipitations, et cette nouvelle donnée servira alors au calcul des dépôts.

Voici les différentes catégories de statistiques figurant dans les sections III à VI : le nombre d'échantillons, les moyennes (arithmétiques/géométriques), les écarts-types (arithmétiques/géométriques), le maximum, le minimum, les quartiles et la précipitation moyenne pondérée (calculée à l'aide de la hauteur totale des précipitations, le cas échéant). Toutes les statistiques représentent des périodes d'échantillonnage moyennes; les données correspondant à des périodes d'échantillonnage irrégulières ont été combinées, si elles ont été obtenues pendant des périodes consécutives de 28 jours (± 5 jours), ou supprimées avant le calcul des statistiques.

PART II

STATION DESCRIPTION AND LOCATION MAP



1. Colchester*
2. Merlin
3. Pt. Stanley*
4. Wilkesport*
5. Alvinston
6. Huron Park
7. Waterloo
8. Palmerston*
9. Shallow Lake*
10. Milton (removed March '84)
11. Uxbridge*
12. Coldwater
13. Campbellford*
14. Cloyne* (repl. Kalladar, June '83)
15. Smith's Falls*
16. Dalhousie Mills*
17. Golden Lake*
18. Wilberforce
19. Whitney
20. Dorset*
21. McKellar*
22. Mattawa*
23. Killarney*
24. Bear Island
25. Gowganda*
26. Azure Lake (repl. Ramsey, June '83)
27. Moonbeam*
28. Attawapiskat (rem. Feb '84)
29. Winisk (rem. Dec '86)
30. Geraldton (replaced Nakina, Aug '83)
31. Dorion*
32. Quetico Centre*
33. Lac la Croix
34. Experimental Lakes Area
35. Ear Falls*
36. Pickle Lake*
37. Turkey Lake*
38. Moosonee* (installed October '85)
39. Otter Island* (summer only)
40. Sutton, Quebec (Intercomparison Site)

* indicates both a wet and dry deposition network site

APIOS CUMULATIVE WET AND DRY DEPOSITION NETWORK SITE DESCRIPTIONS

MOE REGION	STATION NAME	ELEVATION (m above MSL)	LATITUDE (North)	LONGITUDE (West)	UTM GRID CO-ORDINANTS (Northing)	(Easting)
Southwestern	Colchester	183	41°59'15"	82°55'41"	4650000	340300
	Alvinston	221	42°49'36"	81°50'04"	4942000	431550
	Pt. Stanley	213	42°40'22"	81°09'55"	4724050	486700
	Huron Park	250	43°17'28"	81°30'03"	4793000	459350
	Wilkesport	183	42°42'11"	82°21'13"	4728350	389150
	Merlin	191	42°14'47"	82°13'30"	4676400	398950
	Shallow Lake	229	44°34'54"	8°05'24"	4936200	492850
	Palmerston	389	43°48'19"	80°54'12"	4850050	507750
	Waterloo	343	43°28'39"	80°35'09"	4813750	533500
Central	Dorset	320	45°13'26"	78°55'52"	5009650	662400
	Coldwater	280	44°37'31"	79°32'08"	4942200	615900
	Milton	221	43°31'05"	79°55'54"	4818600	586350
	Uxbridge	244	44°12'46"	79°12'38"	4896800	643000
	Campbellford	175	44°17'28"	77°47'33"	4907600	277150
	Wilberforce	396	45°00'54"	78°12'58"	4988150	719400
Southeastern	Smith's Falls	122	44°56'41"	75°57'48"	4977100	423950
	Dalhousie Mills	69	45°19'00"	74°28'13"	5018100	541550
	Golden Lake	160	45°36'48"	77°12'03"	5053200	328400
	Cloyne	259	44°49'09"	77°11'45"	4964750	327100
Northeastern	McKellar	244	45°30'57"	79°55'19"	5040600	583950
	Azure Lake	244	47°28'12"	81°52'30"	5257650	434250
	Killarney	183	45°59'26"	81°29'18"	5092900	462200
	Bear Island	305	46°58'22"	80°04'40"	5202400	570350
	Mattawa	198	46°16'45"	78°49'19"	5127150	667800
	Gowganda	343	47°39'04"	80°46'32"	5277300	516600
	Moonbeam	244	49°19'16"	82°08'46"	5463600	416650
	Moosonee	4	51°12'35"	80°42'20"	5673000	520550
	Turkey Lake	472	47°03'15"	84°24'00"	5214250	696750
	Whitney	412	45°32'21"	78°15'35"	5045950	713950
	Attawapiskat	9	52°56'00"	82°24'00"	NA	NA
Northwestern	Otter Island	204	48°06'50"	86°04'25"	5328750	569500
	Dorion	244	48°50'33"	88°36'45"	5410800	382150
	E.L.A.	123	49°39'22"	93°43'28"	5500950	447350
	Geraldton	351	49°48'05"	86°46'00"	5516300	516750
	Lac La Croix	368	48°21'14"	92°12'32"	5355900	558400
	Ear Falls	350	50°38'31"	93°13'13"	5609800	484150
	Quetico Centre	420	48°44'24"	91°12'08"	5399750	632100
	Pickle Lake	360	51°27'41"	90°12'04"	5704800	694550
	Winisk	9	55°12'00"	85°08'00"	NA	NA
Quebec	Sutton	243	45°04'35"	72°40'35"	4995100	680950

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PART III

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY STATION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : ALVINSTON/CUMULATIVE PRECIP. 805

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	12	12	12	12	12	12
MAXIMUM	189.0	38.4	4.56	0.0741	0.1060	4.15	0.820
MINIMUM	33.0	16.9	4.13	0.0275	0.0506	1.65	0.340
RANGE	156.0	21.5	0.43	0.0466	0.0554	2.50	0.480
ARITH. MEAN	72.4	30.3	4.27	0.0556	0.0784	3.08	0.526
ARITH. STD. DEV	40.9	5.5	0.11	0.0121	0.0136	0.75	0.149
GEOM. MEAN	64.8	29.7	4.27	0.0541	0.0773	2.98	0.508
GEOM. STD. DEV.	1.6	1.2	1.03	1.2950	1.2005	1.34	1.312
1ST QUARTILE	44.0	28.3	4.21	0.0519	0.0744	2.92	0.415
2ND QUARTILE	59.6	30.7	4.23	0.0582	0.0785	3.15	0.495
3RD QUARTILE	76.6	32.9	4.28	0.0617	0.0823	3.52	0.595
VOL. WGT. MEAN	#######	30.4	#######	0.0563	0.0794	3.08	0.506

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.520	0.370	0.700	0.110	0.110	0.185	0.590
MINIMUM	0.080	0.090	0.130	0.015	0.005	0.010	0.105
RANGE	0.440	0.280	0.570	0.095	0.105	0.175	0.485
ARITH. MEAN	0.342	0.184	0.398	0.068	0.050	0.063	0.327
ARITH. STD. DEV	0.135	0.080	0.140	0.026	0.037	0.048	0.149
GEOM. MEAN	0.308	0.170	0.372	0.056	0.037	0.048	0.291
GEOM. STD. DEV.	1.705	1.496	1.496	1.695	2.373	2.187	1.701
1ST QUARTILE	0.235	0.130	0.315	0.042	0.025	0.030	0.220
2ND QUARTILE	0.375	0.155	0.385	0.062	0.025	0.040	0.288
3RD QUARTILE	0.425	0.205	0.420	0.077	0.065	0.072	0.397
VOL. WGT. MEAN	0.312	0.175	0.410	0.060	0.046	0.056	0.336

: INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : ALVINSTON/CUMULATIVE PRECIP. 805

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0230	33.00	6.50	12.00	142.00	8.94	1.00
MINIMUM	0.0000	1.00	0.20	2.49	11.72	1.17	0.40
RANGE	0.0230	32.00	6.30	9.51	130.28	7.76	0.60
ARITH. MEAN	0.0058	6.15	1.05	6.98	45.73	4.00	0.47
ARITH. STD. DEV	0.0066	8.55	1.81	2.48	33.39	2.37	0.17
GEOM. MEAN	0.0170	3.73	0.44	6.52	37.46	3.43	0.45
GEOM. STD. DEV.	4.2580	2.58	3.40	1.50	1.92	1.79	1.31
1ST QUARTILE	0.0005	2.00	0.20	5.72	26.18	2.48	0.49
2ND QUARTILE	0.0030	3.50	0.20	6.57	38.55	3.13	0.40
3RD QUARTILE	0.0090	4.50	0.75	7.87	48.01	4.34	0.40
VOL. WGT. MEAN	0.0049	5.16	0.93	6.83	40.10	3.86	0.45

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13
MAXIMUM	147.00	10.15	0.35
MINIMUM	13.82	0.27	0.02
RANGE	133.18	9.88	0.33
ARITH. MEAN	45.61	2.17	0.09
ARITH. STD. DEV	34.94	2.67	0.11
GEOM. MEAN	37.56	1.21	0.05
GEOM. STD. DEV.	1.85	3.11	3.00
1ST QUARTILE	24.79	0.39	0.02
2ND QUARTILE	30.95	1.37	0.02
3RD QUARTILE	47.19	2.54	0.09
VOL. WGT. MEAN	38.22	1.89	0.08

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : AZURE LAKE/CUMULATIVE PRECIP. #26

PERIOD OF REPORT : JAN 2,86 TO JAN 5,87

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	13	13	13	13	13	12	13
MAXIMUM :	148.0	31.5	4.84	0.0575	0.0796	3.45	0.570
MINIMUM :	10.0	10.5	4.24	0.0145	0.0328	0.90	0.110
RANGE :	138.0	21.0	0.60	0.0431	0.0468	2.55	0.460
ARITH. MEAN :	62.5	19.8	4.49	0.0349	0.0577	1.97	0.295
ARITH. STD. DEV :	38.5	6.8	0.18	0.0134	0.0163	0.83	0.144
GEOM. MEAN :	50.6	18.7	4.49	0.0324	0.0555	1.81	0.264
GEOM. STD. DEV. :	2.1	1.4	1.04	1.5157	1.3516	1.55	1.657
1ST QUARTILE :	35.9	14.1	4.34	0.0234	0.0425	1.35	0.190
2ND QUARTILE :	52.7	17.3	4.44	0.0336	0.0574	1.82	0.225
3RD QUARTILE :	79.0	24.7	4.63	0.0442	0.0679	2.57	0.390
VOL. WGT. MEAN :	*******	19.5	*******	0.0341	0.0557	1.98	0.289

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	0.460	1.230	0.890	0.050	0.110	0.825	0.580
MINIMUM :	0.050	0.030	0.140	0.010	0.000	0.000	0.000
RANGE :	0.410	1.200	0.750	0.040	0.110	0.825	0.580
ARITH. MEAN :	0.178	0.195	0.356	0.023	0.025	0.112	0.226
ARITH. STD. DEV :	0.108	0.320	0.244	0.014	0.032	0.223	0.177
GEOM. MEAN :	0.152	0.105	0.295	0.019	0.034	0.081	0.224
GEOM. STD. DEV. :	1.833	2.776	1.852	1.773	3.131	3.687	1.928
1ST QUARTILE :	0.095	0.055	0.175	0.010	0.005	0.012	0.105
2ND QUARTILE :	0.150	0.080	0.235	0.020	0.012	0.025	0.135
3RD QUARTILE :	0.215	0.165	0.425	0.025	0.030	0.077	0.307
VOL. WGT. MEAN :	0.194	0.157	0.361	0.025	0.027	0.084	0.233

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : AZURE LAKE/CUMULATIVE PRECIP. 826

PERIOD OF REPORT : JAN 2,86 TO JAN 5,87

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	13	12	12	12	12	12	12
MAXIMUM	0.0440	5.00	3.30	23.92	74.11	8.51	0.90
MINIMUM	0.0000	1.00	0.20	1.25	8.04	1.25	0.40
RANGE	0.0440	4.00	3.10	22.67	66.07	7.26	0.50
ARITH. MEAN	0.0110	2.17	0.57	7.54	28.22	3.56	0.44
ARITH. STD. DEV	0.0131	1.40	0.94	6.43	18.53	2.24	0.14
GEOM. MEAN	0.0465	1.79	0.31	5.57	23.32	2.97	0.43
GEOM. STD. DEV.	3.8731	1.90	2.57	2.28	1.93	1.89	1.26
1ST QUARTILE	0.0000	1.00	0.20	3.12	13.84	1.68	0.40
2ND QUARTILE	0.0055	1.50	0.20	5.72	25.50	2.75	0.40
3RD QUARTILE	0.0130	3.00	0.25	9.55	36.71	5.03	0.40
VOL. WGT. MEAN	0.0072	2.17	0.54	6.55	23.32	3.04	0.44

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	12	12	12
MAXIMUM	62.60	6.28	0.85
MINIMUM	7.95	0.25	0.02
RANGE	54.65	6.03	0.83
ARITH. MEAN	29.06	1.41	0.12
ARITH. STD. DEV	20.08	1.71	0.24
GEOM. MEAN	22.80	0.86	0.05
GEOM. STD. DEV.	2.11	2.73	3.53
1ST QUARTILE	11.45	0.31	0.02
2ND QUARTILE	24.31	0.82	0.02
3RD QUARTILE	43.80	1.71	0.12
VOL. WGT. MEAN	24.98	1.04	0.10

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. 824

PERIOD OF REPORT : JAN 28,86 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	12	12	12	12	12	12	12
MAXIMUM	107.0	46.4	4.61	0.0891	0.1130	5.15	0.850
MINIMUM	18.7	13.5	4.05	0.0245	0.0308	0.95	0.130
RANGE	88.3	32.9	0.56	0.0646	0.0822	4.20	0.720
ARITH. MEAN	68.7	23.2	4.41	0.0419	0.0637	2.33	0.388
ARITH. STD. DEV	32.2	10.0	0.18	0.0201	0.0240	1.11	0.232
GEOM. MEAN	59.2	21.6	4.41	0.0385	0.0598	2.12	0.330
GEOM. STD. DEV.	1.9	1.5	1.04	1.5131	1.4418	1.56	1.823
1ST QUARTILE	38.6	16.1	4.33	0.0276	0.0481	1.55	0.200
2ND QUARTILE	74.8	19.6	4.45	0.0355	0.0554	2.23	0.340
3RD QUARTILE	94.8	28.3	4.56	0.0468	0.0788	2.60	0.495
VOL. WGT. MEAN	########	22.9	########	0.0421	0.0621	2.36	0.355

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	12	12	12	12	12	12	12
MAXIMUM	0.420	0.520	1.000	0.070	0.140	0.385	0.780
MINIMUM	0.040	0.030	0.090	0.005	0.015	0.000	0.000
RANGE	0.380	0.490	0.910	0.065	0.125	0.385	0.780
ARITH. MEAN	0.172	0.145	0.394	0.029	0.062	0.072	0.292
ARITH. STD. DEV	0.113	0.137	0.256	0.019	0.040	0.104	0.220
GEOM. MEAN	0.139	0.106	0.323	0.023	0.051	0.063	0.291
GEOM. STD. DEV.	2.006	2.227	1.991	2.088	1.994	2.474	1.958
1ST QUARTILE	0.090	0.065	0.235	0.015	0.030	0.020	0.137
2ND QUARTILE	0.130	0.105	0.325	0.027	0.052	0.035	0.248
3RD QUARTILE	0.230	0.150	0.530	0.032	0.092	0.070	0.407
VOL. WGT. MEAN	0.154	0.116	0.369	0.026	0.070	0.051	0.283

: INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. 824

PERIOD OF REPORT : JAN 28,86 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	12	12	12	12	12	12	11
MAXIMUM	0.0700	5.00	4.00	19.57	54.46	8.95	0.50
MINIMUM	0.0020	1.00	0.20	4.33	10.22	1.16	0.40
RANGE	0.0680	4.00	3.80	15.24	44.24	7.78	0.10
ARITH. MEAN	0.0141	2.58	1.30	9.08	30.70	3.28	0.41
ARITH. STD. DEV	0.0184	1.31	1.17	5.60	14.71	2.22	0.03
GEOM. MEAN	0.0087	2.25	0.87	7.78	27.21	2.71	0.41
GEOM. STD. DEV.	2.6763	1.77	2.68	1.75	1.71	1.89	1.07
1ST QUARTILE	0.0050	1.50	0.45	4.89	18.42	1.47	0.40
2ND QUARTILE	0.0100	2.50	0.90	6.43	31.46	2.93	0.40
3RD QUARTILE	0.0125	3.50	1.85	12.80	41.71	4.41	0.40
VOL. WGT. MEAN	0.0113	2.48	1.22	7.75	27.88	3.32	0.41

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	12	12	12
MAXIMUM	119.90	25.92	0.56
MINIMUM	11.26	0.38	0.02
RANGE	108.64	25.53	0.54
ARITH. MEAN	37.07	4.70	0.11
ARITH. STD. DEV	33.02	7.08	0.15
GEOM. MEAN	27.27	2.25	0.06
GEOM. STD. DEV.	2.21	3.50	3.08
1ST QUARTILE	13.18	0.96	0.02
2ND QUARTILE	23.02	2.18	0.08
3RD QUARTILE	56.08	5.69	0.13
VOL. WGT. MEAN	29.66	3.16	0.07

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	150.0	65.7	4.55	0.1259	0.1590	6.70	1.070
MINIMUM	29.0	14.8	3.90	0.0282	0.0496	1.05	0.270
RANGE	121.0	50.9	0.65	0.0977	0.1094	5.65	0.800
ARITH. MEAN	64.7	33.8	4.24	0.0643	0.0887	3.18	0.586
ARITH. STD. DEV	29.0	15.4	0.22	0.0345	0.0368	1.60	0.226
GEOM. MEAN	60.2	30.9	4.24	0.0569	0.0826	2.83	0.546
GEOM. STD. DEV.	1.5	1.6	1.05	1.6563	1.4708	1.68	1.484
1ST QUARTILE	47.7	22.3	4.06	0.0385	0.0606	1.97	0.415
2ND QUARTILE	58.8	29.4	4.25	0.0514	0.0768	2.77	0.515
3RD QUARTILE	68.6	35.1	4.37	0.0653	0.0894	3.75	0.720
VOL. WGT. MEAN	*******	32.3	*******	0.0616	0.0856	3.10	0.544

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.490	0.350	0.880	0.065	0.045	0.165	0.730
MINIMUM	0.100	0.070	0.140	0.020	0.000	0.000	0.105
RANGE	0.390	0.280	0.740	0.045	0.045	0.165	0.625
ARITH. MEAN	0.296	0.158	0.409	0.038	0.020	0.055	0.343
ARITH. STD. DEV	0.117	0.088	0.200	0.017	0.014	0.051	0.174
GEOM. MEAN	0.270	0.140	0.365	0.034	0.038	0.052	0.301
GEOM. STD. DEV.	1.637	1.657	1.673	1.568	2.137	2.614	1.744
1ST QUARTILE	0.245	0.095	0.265	0.022	0.010	0.012	0.205
2ND QUARTILE	0.280	0.120	0.375	0.032	0.017	0.032	0.310
3RD QUARTILE	0.345	0.165	0.465	0.045	0.030	0.082	0.400
VOL. WGT. MEAN	0.273	0.145	0.407	0.037	0.019	0.047	0.334

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0130	5.00	3.10	8.05	50.46	8.18	0.50
MINIMUM	0.0000	1.00	0.20	1.79	6.61	1.43	0.40
RANGE	0.0130	4.00	2.90	6.25	43.85	6.75	0.10
ARITH. MEAN	0.0048	2.85	0.52	5.40	26.03	4.41	0.41
ARITH. STD. DEV	0.0044	1.46	0.81	2.30	11.34	1.95	0.03
GEOM. MEAN	0.0097	2.45	0.32	4.82	23.30	3.98	0.41
GEOM. STD. DEV.	3.1761	1.83	2.31	1.72	1.71	1.64	1.06
1ST QUARTILE	0.0010	1.50	0.20	3.13	20.29	2.87	0.40
2ND QUARTILE	0.0035	2.50	0.20	5.49	24.96	3.98	0.40
3RD QUARTILE	0.0065	4.00	0.30	7.14	29.69	5.42	0.40
VOL. WGT. MEAN	0.0044	2.73	0.51	5.20	23.62	4.13	0.41

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13
MAXIMUM	59.27	2.33	0.13
MINIMUM	6.66	0.29	0.02
RANGE	52.61	2.04	0.11
ARITH. MEAN	32.03	0.96	0.05
ARITH. STD. DEV	14.23	0.72	0.04
GEOM. MEAN	28.07	0.76	0.04
GEOM. STD. DEV.	1.83	2.06	2.16
1ST QUARTILE	22.98	0.37	0.02
2ND QUARTILE	32.82	0.74	0.02
3RD QUARTILE	39.35	0.97	0.06
VOL. WGT. MEAN	29.22	0.95	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CLOYNE/CUMULATIVE PRECIP. #14

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	13	11	11	11	11	11	11
MAXIMUM :	142.8	38.1	4.63	0.0676	0.0973	3.90	0.590
MINIMUM :	39.0	13.0	4.17	0.0234	0.0448	1.05	0.250
RANGE :	103.8	25.1	0.46	0.0442	0.0525	2.85	0.340
ARITH. MEAN :	80.0	23.9	4.38	0.0434	0.0657	2.34	0.401
ARITH. STD. DEV :	34.2	7.1	0.15	0.0136	0.0164	0.84	0.122
GEOM. MEAN :	73.8	22.9	4.38	0.0413	0.0638	2.19	0.384
GEOM. STD. DEV. :	1.5	1.4	1.03	1.4078	1.2870	1.48	1.360
1ST QUARTILE :	54.0	17.0	4.27	0.0271	0.0459	1.42	0.280
2ND QUARTILE :	68.9	23.4	4.34	0.0427	0.0652	2.38	0.365
3RD QUARTILE :	87.5	26.1	4.46	0.0525	0.0708	2.80	0.510
VOL. WGT. MEAN :	*******	24.5	*******	0.0443	0.0663	2.51	0.382

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	11	11	11	11	11	11	11
MAXIMUM :	0.330	0.290	0.420	0.065	0.085	0.110	0.360
MINIMUM :	0.060	0.050	0.180	0.010	0.015	0.000	0.085
RANGE :	0.270	0.240	0.240	0.055	0.070	0.110	0.275
ARITH. MEAN :	0.195	0.132	0.335	0.030	0.035	0.050	0.256
ARITH. STD. DEV :	0.081	0.069	0.073	0.018	0.019	0.036	0.095
GEOM. MEAN :	0.178	0.116	0.325	0.025	0.032	0.058	0.236
GEOM. STD. DEV. :	1.634	1.703	1.303	1.878	1.588	2.143	1.592
1ST QUARTILE :	0.120	0.065	0.275	0.015	0.022	0.015	0.150
2ND QUARTILE :	0.180	0.120	0.350	0.020	0.030	0.042	0.267
3RD QUARTILE :	0.260	0.165	0.370	0.040	0.040	0.075	0.330
VOL. WGT. MEAN :	0.191	0.113	0.340	0.030	0.035	0.039	0.274

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CLOYNE/CUMULATIVE PRECIP. #14

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	0.0360	14.00	0.40	8.30	50.20	5.42	0.70
MINIMUM	0.0010	1.00	0.20	3.51	7.52	1.28	0.40
RANGE	0.0350	13.00	0.20	4.79	42.68	4.14	0.30
ARITH. MEAN	0.0087	3.36	0.25	5.21	22.67	2.87	0.45
ARITH. STD. DEV	0.0100	3.72	0.07	1.43	12.46	1.33	0.09
GEOM. MEAN	0.0053	2.40	0.24	5.05	19.83	2.60	0.44
GEOM. STD. DEV.	2.8540	2.20	1.29	1.30	1.73	1.61	1.20
1ST QUARTILE	0.0020	1.00	0.20	4.00	12.97	1.52	0.40
2ND QUARTILE	0.0050	2.00	0.20	4.49	16.54	2.45	0.40
3RD QUARTILE	0.0105	3.00	0.30	6.01	28.79	3.64	0.45
VOL. WGT. MEAN	0.0079	3.05	0.23	5.20	19.81	2.64	0.43

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	11	11	11
MAXIMUM	42.61	3.31	0.12
MINIMUM	10.54	0.26	0.02
RANGE	32.07	3.05	0.10
ARITH. MEAN	22.67	1.48	0.05
ARITH. STD. DEV	10.10	0.94	0.03
GEOM. MEAN	20.75	1.14	0.04
GEOM. STD. DEV.	1.55	2.33	1.94
1ST QUARTILE	13.06	0.43	0.02
2ND QUARTILE	19.50	1.34	0.05
3RD QUARTILE	28.87	2.08	0.06
VOL. WGT. MEAN	20.57	1.44	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLCHESTER/CUMULATIVE PRECIP. #01

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	183.0	49.1	4.66	0.0933	0.1230	5.15	1.180
MINIMUM	23.5	21.8	4.03	0.0219	0.0462	2.00	0.280
RANGE	159.5	27.3	0.63	0.0714	0.0768	3.15	0.900
ARITH. MEAN	77.5	34.9	4.20	0.0662	0.0905	3.52	0.558
ARITH. STD. DEV	50.4	8.0	0.17	0.0206	0.0212	0.90	0.253
GEOM. MEAN	65.7	34.0	4.20	0.0624	0.0880	3.42	0.512
GEOM. STD. DEV.	1.8	1.3	1.04	1.4727	1.2948	1.30	1.532
1ST QUARTILE	42.5	28.2	4.06	0.0537	0.0770	2.90	0.340
2ND QUARTILE	60.7	34.6	4.18	0.0576	0.0859	3.40	0.475
3RD QUARTILE	76.5	39.6	4.27	0.0823	0.1040	3.82	0.705
VOL. WGT. MEAN	########	32.2	########	0.0589	0.0828	3.54	0.473

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	12	13	13	13	13
MAXIMUM	0.510	0.590	1.090	0.100	0.130	0.195	0.900
MINIMUM	0.080	0.140	0.110	0.015	0.005	0.010	0.120
RANGE	0.430	0.450	0.980	0.085	0.125	0.185	0.780
ARITH. MEAN	0.258	0.240	0.562	0.049	0.043	0.071	0.465
ARITH. STD. DEV	0.144	0.130	0.303	0.023	0.036	0.052	0.239
GEOM. MEAN	0.221	0.217	0.481	0.043	0.032	0.055	0.404
GEOM. STD. DEV.	1.834	1.541	1.883	1.721	2.356	2.200	1.787
1ST QUARTILE	0.120	0.155	0.340	0.027	0.017	0.035	0.265
2ND QUARTILE	0.230	0.185	0.480	0.050	0.032	0.062	0.402
3RD QUARTILE	0.295	0.240	0.710	0.060	0.045	0.070	0.565
VOL. WGT. MEAN	0.233	0.214	0.621	0.046	0.051	0.067	0.502

: INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLCHESTER/CUMULATIVE PRECIP. #01

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	12	13	13	13	13	13	13
MAXIMUM	0.0970	7.00	4.50	30.19	213.10	33.47	0.70
MINIMUM	0.0000	1.00	0.20	4.06	11.85	2.25	0.40
RANGE	0.0970	6.00	4.30	26.13	201.25	31.22	0.30
ARITH. MEAN	0.0193	2.77	0.62	12.93	45.88	6.63	0.42
ARITH. STD. DEV	0.0317	1.74	1.18	8.05	52.28	8.36	0.08
GEOM. MEAN	0.0119	2.29	0.33	11.02	33.34	4.59	0.42
GEOM. STD. DEV.	4.2217	1.93	2.46	1.79	2.10	2.17	1.17
1ST QUARTILE	0.0020	1.00	0.20	7.63	20.73	2.41	0.40
2ND QUARTILE	0.0060	2.50	0.20	10.63	28.65	3.53	0.40
3RD QUARTILE	0.0160	3.50	0.40	12.99	44.25	6.33	0.40
VOL. WGT. MEAN	0.0305	2.66	0.45	11.52	40.36	5.62	0.42

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	13	12	3
MAXIMUM	87.74	2.64	0.26
MINIMUM	7.83	0.34	0.02
RANGE	79.91	2.29	0.24
ARITH. MEAN	40.37	1.13	0.10
ARITH. STD. DEV	25.22	0.72	0.08
GEOM. MEAN	32.91	0.92	0.07
GEOM. STD. DEV.	2.02	2.01	2.41
1ST QUARTILE	20.28	0.46	0.03
2ND QUARTILE	31.72	1.00	0.08
3RD QUARTILE	50.38	1.69	0.11
VOL. WGT. MEAN	33.95	1.02	0.11

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLDWATER/CUMULATIVE PRECIP. 912

PERIOD OF REPORT : JAN 28,86 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	12	11	11	11	11	12	12
MAXIMUM	167.0	39.2	5.13	0.0832	0.1030	3.20	0.930
MINIMUM	35.0	6.1	4.08	0.0074	0.0249	0.50	0.140
RANGE	132.0	33.1	1.05	0.0758	0.0781	2.70	0.790
ARITH. MEAN	86.0	23.2	4.48	0.0391	0.0607	2.34	0.448
ARITH. STD. DEV	44.0	8.8	0.29	0.0217	0.0211	0.89	0.202
GEOM. MEAN	76.4	21.1	4.47	0.0329	0.0571	2.08	0.407
GEOM. STD. DEV.	1.7	1.7	1.07	1.9670	1.4648	1.79	1.614
1ST QUARTILE	51.5	15.0	4.26	0.0184	0.0425	1.90	0.305
2ND QUARTILE	82.8	24.3	4.40	0.0356	0.0566	2.60	0.425
3RD QUARTILE	103.5	27.3	4.61	0.0490	0.0722	2.97	0.520
VOL. WGT. MEAN	#######	23.9	#######	0.0397	0.0618	2.45	0.422

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	12	12	10	12	11	12	11
MAXIMUM	0.630	0.270	0.910	0.075	0.075	0.115	0.710
MINIMUM	0.080	0.060	0.040	0.015	0.000	0.000	0.085
RANGE	0.550	0.210	0.870	0.060	0.075	0.115	0.625
ARITH. MEAN	0.263	0.121	0.428	0.042	0.038	0.043	0.374
ARITH. STD. DEV	0.144	0.071	0.239	0.020	0.023	0.038	0.216
GEOM. MEAN	0.232	0.107	0.340	0.037	0.048	0.045	0.307
GEOM. STD. DEV.	1.705	1.636	2.374	1.734	1.983	2.544	2.046
1ST QUARTILE	0.160	0.080	0.255	0.025	0.012	0.017	0.130
2ND QUARTILE	0.240	0.095	0.410	0.042	0.037	0.030	0.350
3RD QUARTILE	0.300	0.125	0.510	0.055	0.055	0.067	0.515
VOL. WGT. MEAN	0.256	0.114	0.468	0.045	0.040	0.041	0.381

: INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLDWATER/CUMULATIVE PRECIP. #12

PERIOD OF REPORT : JAN 28,86 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	10	11	11	11	10	11	11
MAXIMUM	0.0520	8.00	7.00	7.72	72.55	6.38	1.50
MINIMUM	0.0000	1.00	0.20	1.22	13.03	1.17	0.40
RANGE	0.0520	7.00	6.80	6.50	59.52	5.22	1.10
ARITH. MEAN	0.0116	3.45	0.85	4.44	35.35	3.40	0.51
ARITH. STD. DEV	0.0159	2.16	2.04	2.20	20.79	1.75	0.33
GEOM. MEAN	0.0114	2.86	0.31	3.84	30.01	2.99	0.46
GEOM. STD. DEV.	3.4461	1.96	2.90	1.84	1.85	1.72	1.49
1ST QUARTILE	0.0015	1.50	0.20	1.87	15.46	1.79	0.40
2ND QUARTILE	0.0065	3.00	0.20	4.35	27.88	2.88	0.40
3RD QUARTILE	0.0095	4.50	0.25	6.12	47.84	4.77	0.40
VOL. WGT. MEAN	0.0109	3.99	0.66	4.30	35.53	2.91	0.54

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	11	11	11
MAXIMUM	100.80	1.22	0.13
MINIMUM	14.55	0.24	0.02
RANGE	86.25	0.98	0.11
ARITH. MEAN	44.29	0.59	0.05
ARITH. STD. DEV	26.54	0.37	0.04
GEOM. MEAN	37.60	0.50	0.04
GEOM. STD. DEV.	1.84	1.78	2.16
1ST QUARTILE	21.63	0.31	0.02
2ND QUARTILE	30.35	0.40	0.02
3RD QUARTILE	63.70	0.82	0.07
VOL. WGT. MEAN	44.30	0.61	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	12	12	13	13	13
MAXIMUM	141.0	49.9	4.95	0.1047	0.1350	5.45	1.020
MINIMUM	26.0	9.6	3.98	0.0112	0.0311	0.85	0.220
RANGE	115.0	40.3	0.97	0.0935	0.1039	4.60	0.800
ARITH. MEAN	65.3	28.0	4.42	0.0443	0.0702	3.13	0.520
ARITH. STD. DEV	30.5	11.7	0.25	0.0260	0.0307	1.50	0.226
GEOM. MEAN	59.1	25.7	4.41	0.0382	0.0646	2.74	0.477
GEOM. STD. DEV.	1.8	1.6	1.06	1.7898	1.5231	1.79	1.549
1ST QUARTILE	43.5	21.5	4.33	0.0295	0.0483	1.90	0.345
2ND QUARTILE	58.5	25.4	4.40	0.0399	0.0613	2.93	0.465
3RD QUARTILE	77.0	31.6	4.53	0.0468	0.0765	3.92	0.590
VOL. WGT. MEAN	********	26.8	*******	0.0419	0.0660	3.05	0.464

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	11	10	10	12	13	10
MAXIMUM	0.640	0.550	0.700	0.355	0.190	0.380	0.440
MINIMUM	0.070	0.080	0.160	0.005	0.000	0.000	0.075
RANGE	0.570	0.470	0.540	0.350	0.190	0.380	0.365
ARITH. MEAN	0.285	0.227	0.426	0.173	0.055	0.096	0.297
ARITH. STD. DEV	0.194	0.154	0.190	0.125	0.060	0.101	0.114
GEOM. MEAN	0.230	0.191	0.386	0.104	0.052	0.089	0.269
GEOM. STD. DEV.	1.984	1.816	1.627	3.951	2.620	2.361	1.704
1ST QUARTILE	0.135	0.120	0.255	0.045	0.015	0.030	0.200
2ND QUARTILE	0.190	0.155	0.400	0.152	0.035	0.057	0.317
3RD QUARTILE	0.335	0.260	0.540	0.270	0.067	0.115	0.373
VOL. WGT. MEAN	0.246	0.197	0.443	0.196	0.053	0.079	0.307

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	10	13	13	13	13	13	13
MAXIMUM	0.0090	9.00	1.90	20.82	107.00	27.89	0.80
MINIMUM	0.0010	1.00	0.20	1.23	9.69	1.11	0.40
RANGE	0.0080	8.00	1.70	19.59	97.31	26.78	0.40
ARITH. MEAN	0.0052	4.00	0.45	8.84	28.42	6.43	0.45
ARITH. STD. DEV	0.0025	2.58	0.50	6.34	25.44	7.18	0.12
GEOM. MEAN	0.0045	3.27	0.32	6.62	22.57	4.26	0.44
GEOM. STD. DEV.	1.9132	1.96	2.07	2.36	1.92	2.49	1.24
1ST QUARTILE	0.0030	2.00	0.20	3.55	13.68	1.94	0.40
2ND QUARTILE	0.0055	2.50	0.20	6.77	20.80	3.77	0.40
3RD QUARTILE	0.0065	5.50	0.35	11.35	28.26	5.89	0.40
VOL. WGT. MEAN	0.0049	3.66	0.38	7.31	26.26	4.61	0.44

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	13	13	13
MAXIMUM	79.16	12.91	0.35
MINIMUM	8.68	0.30	0.02
RANGE	70.48	12.61	0.33
ARITH. MEAN	32.34	2.21	0.11
ARITH. STD. DEV	18.91	3.42	0.12
GEOM. MEAN	27.55	1.15	0.06
GEOM. STD. DEV.	1.84	2.98	3.19
1ST QUARTILE	13.38	0.50	0.02
2ND QUARTILE	27.59	0.90	0.03
3RD QUARTILE	38.80	1.64	0.13
VOL. WGT. MEAN	27.53	1.75	0.07

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORION/CUMULATIVE PRECIP. #31

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	103.7	42.8	5.17	0.0661	0.0957	5.55	0.810
MINIMUM	10.4	5.9	4.18	0.0068	0.0260	0.50	0.150
RANGE	93.3	36.9	0.99	0.0593	0.0697	5.05	0.660
ARITH. MEAN	50.0	17.2	4.63	0.0290	0.0505	1.74	0.347
ARITH. STD. DEV	29.8	10.5	0.30	0.0196	0.0217	1.31	0.204
GEOM. MEAN	40.8	14.8	4.62	0.0234	0.0468	1.43	0.303
GEOM. STD. DEV.	2.1	1.8	1.07	2.0174	1.4881	1.85	1.690
1ST QUARTILE	27.4	9.8	4.36	0.0170	0.0370	1.00	0.200
2ND QUARTILE	42.1	12.9	4.65	0.0209	0.0421	1.22	0.245
3RD QUARTILE	61.5	19.3	4.75	0.0322	0.0560	2.00	0.415
VOL. WGT. MEAN	*******	15.8	*******	0.0248	0.0465	1.66	0.316

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.680	0.420	1.070	0.100	0.110	0.275	0.680
MINIMUM	0.070	0.040	0.090	0.005	0.000	0.015	0.010
RANGE	0.610	0.380	0.980	0.095	0.110	0.260	0.670
ARITH. MEAN	0.205	0.125	0.376	0.033	0.033	0.068	0.280
ARITH. STD. DEV	0.167	0.100	0.256	0.029	0.027	0.070	0.221
GEOM. MEAN	0.165	0.103	0.311	0.025	0.039	0.048	0.197
GEOM. STD. DEV.	1.886	1.841	1.911	2.174	1.938	2.289	2.903
1ST QUARTILE	0.100	0.075	0.200	0.017	0.017	0.025	0.150
2ND QUARTILE	0.130	0.095	0.320	0.020	0.027	0.045	0.215
3RD QUARTILE	0.225	0.100	0.395	0.032	0.037	0.065	0.298
VOL. WGT. MEAN	0.193	0.093	0.387	0.033	0.033	0.044	0.289

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORION/CUMULATIVE PRECIP. 831

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0160	15.00	2.70	32.27	211.50	6.89	0.40
MINIMUM	0.0000	1.00	0.20	1.86	17.86	1.18	0.40
RANGE	0.0160	14.00	2.50	30.41	193.64	5.71	0.00
ARITH. MEAN	0.0082	3.23	0.52	7.90	41.85	3.85	0.40
ARITH. STD. DEV	0.0054	3.75	0.69	8.56	51.75	1.93	0.00
GEOM. MEAN	0.0181	2.27	0.35	5.52	30.94	3.39	0.40
GEOM. STD. DEV.	2.3169	2.20	2.24	2.25	1.93	1.73	1.00
1ST QUARTILE	0.0040	1.00	0.20	3.04	19.24	2.27	0.40
2ND QUARTILE	0.0080	2.00	0.20	5.00	25.05	3.04	0.40
3RD QUARTILE	0.0105	3.00	0.40	6.90	33.75	4.79	0.40
VOL. WGT. MEAN	0.0071	2.84	0.45	5.62	31.17	3.84	0.40

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	13	13	13
MAXIMUM	236.80	13.14	1.14
MINIMUM	10.28	0.27	0.02
RANGE	226.52	12.87	1.12
ARITH. MEAN	45.53	2.47	0.23
ARITH. STD. DEV	58.95	3.46	0.37
GEOM. MEAN	31.13	1.29	0.09
GEOM. STD. DEV.	2.22	3.25	4.31
1ST QUARTILE	17.41	0.47	0.02
2ND QUARTILE	30.86	1.02	0.06
3RD QUARTILE	38.47	2.59	0.19
VOL. WGT. MEAN	30.95	2.12	0.19

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/CUMULATIVE PRECIP. 820

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	202.0	47.3	4.70	0.0977	0.1250	5.20	0.830
MINIMUM	40.0	12.4	4.01	0.0200	0.0423	1.05	0.190
RANGE	162.0	34.9	0.69	0.0778	0.0827	4.15	0.640
ARITH. MEAN	80.7	26.6	4.35	0.0486	0.0734	2.47	0.515
ARITH. STD. DEV	50.0	9.9	0.20	0.0213	0.0254	1.13	0.193
GEOM. MEAN	70.5	24.9	4.35	0.0444	0.0693	2.25	0.475
GEOM. STD. DEV.	1.7	1.5	1.05	1.5716	1.4252	1.57	1.562
1ST QUARTILE	49.5	18.1	4.22	0.0306	0.0478	1.47	0.370
2ND QUARTILE	58.6	24.8	4.31	0.0447	0.0742	2.38	0.500
3RD QUARTILE	82.5	30.7	4.43	0.0603	0.0852	2.85	0.620
VOL. WGT. MEAN	*******	23.3	*******	0.0426	0.0651	2.21	0.430

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.520	0.250	0.580	0.105	0.050	0.100	0.485
MINIMUM	0.000	0.050	0.130	0.010	0.000	0.005	0.110
RANGE	0.520	0.200	0.450	0.095	0.050	0.095	0.375
ARITH. MEAN	0.234	0.117	0.365	0.038	0.021	0.035	0.322
ARITH. STD. DEV	0.165	0.059	0.152	0.027	0.013	0.035	0.134
GEOM. MEAN	0.234	0.105	0.329	0.030	0.025	0.022	0.290
GEOM. STD. DEV.	1.979	1.621	1.659	2.063	2.118	2.889	1.672
1ST QUARTILE	0.110	0.065	0.220	0.015	0.008	0.010	0.175
2ND QUARTILE	0.175	0.105	0.395	0.025	0.022	0.015	0.360
3RD QUARTILE	0.295	0.120	0.470	0.050	0.025	0.052	0.405
VOL. WGT. MEAN	0.193	0.102	0.318	0.032	0.017	0.029	0.279

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/CUMULATIVE PRECIP. #20

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0130	6.00	2.60	17.32	87.55	5.04	0.60
MINIMUM	0.0000	1.00	0.20	2.22	7.57	1.16	0.40
RANGE	0.0130	5.00	2.40	15.10	79.98	3.88	0.20
ARITH. MEAN	0.0060	2.69	0.53	6.01	36.77	3.13	0.42
ARITH. STD. DEV	0.0042	1.60	0.71	4.00	25.96	1.34	0.06
GEOM. MEAN	0.0124	2.25	0.33	5.15	28.53	2.83	0.42
GEOM. STD. DEV.	3.0325	1.90	2.43	1.74	2.19	1.63	1.13
1ST QUARTILE	0.0010	1.00	0.20	3.75	17.28	1.93	0.40
2ND QUARTILE	0.0065	2.50	0.20	5.10	28.75	2.81	0.40
3RD QUARTILE	0.0090	3.00	0.25	5.83	37.92	4.13	0.40
VOL. WGT. MEAN	0.0046	2.26	0.42	5.76	31.61	2.75	0.44

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	13	13	13
MAXIMUM	100.20	1.22	0.13
MINIMUM	8.02	0.26	0.02
RANGE	92.18	0.96	0.11
ARITH. MEAN	37.68	0.51	0.05
ARITH. STD. DEV	28.86	0.31	0.04
GEOM. MEAN	29.00	0.44	0.03
GEOM. STD. DEV.	2.16	1.70	2.14
1ST QUARTILE	17.50	0.30	0.02
2ND QUARTILE	27.04	0.33	0.02
3RD QUARTILE	38.09	0.59	0.05
VOL. WGT. MEAN	30.45	0.45	0.04

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EAR FALL'S/CUMULATIVE PRECIP. #35

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	12	12	12	12	12	12
MAXIMUM	100.0	15.8	6.04	0.0295	0.0490	2.40	0.560
MINIMUM	4.3	6.0	4.53	0.0009	0.0160	0.45	0.090
RANGE	95.7	9.8	1.51	0.0286	0.0330	1.95	0.470
ARITH. MEAN	44.4	10.3	5.19	0.0105	0.0287	1.12	0.263
ARITH. STD. DEV	31.7	3.7	0.51	0.0094	0.0095	0.61	0.144
GEOM. MEAN	31.4	9.7	5.17	0.0064	0.0274	1.00	0.228
GEOM. STD. DEV.	2.7	1.4	1.10	3.2404	1.3788	1.67	1.770
1ST QUARTILE	14.3	6.8	4.78	0.0033	0.0218	0.65	0.145
2ND QUARTILE	36.3	10.3	5.10	0.0079	0.0263	0.97	0.225
3RD QUARTILE	60.3	13.4	5.56	0.0172	0.0357	1.38	0.360
VOL. WGT. MEAN	*******	8.5	*******	0.0089	0.0270	0.90	0.199

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	12	12	12	12	12	13	12
MAXIMUM	0.820	0.260	0.800	0.140	0.120	0.225	0.565
MINIMUM	0.040	0.020	0.070	0.010	0.005	0.000	0.020
RANGE	0.780	0.240	0.730	0.130	0.115	0.225	0.545
ARITH. MEAN	0.254	0.130	0.350	0.042	0.036	0.091	0.221
ARITH. STD. DEV	0.246	0.075	0.229	0.039	0.037	0.066	0.169
GEOM. MEAN	0.169	0.102	0.281	0.030	0.023	0.118	0.158
GEOM. STD. DEV.	2.623	2.273	2.085	2.324	2.687	2.821	2.611
1ST QUARTILE	0.100	0.055	0.160	0.015	0.010	0.015	0.092
2ND QUARTILE	0.145	0.150	0.317	0.030	0.020	0.108	0.185
3RD QUARTILE	0.345	0.170	0.510	0.052	0.055	0.120	0.305
VOL. WGT. MEAN	0.186	0.097	0.285	0.032	0.029	0.059	0.164

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EAR FALL'S/CUMULATIVE PRECIP. 835

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	NG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	12	12	12	11	11	11	12
MAXIMUM	0.0310	13.00	2.40	18.64	174.40	8.29	0.40
MINIMUM	0.0000	1.00	0.20	1.34	6.06	1.34	0.40
RANGE	0.0310	12.00	2.20	17.30	168.34	6.95	0.00
ARITH. MEAN	0.0135	4.83	0.57	7.90	50.24	3.23	0.40
ARITH. STD. DEV	0.0107	4.55	0.68	4.89	46.46	2.07	0.00
GEOM. MEAN	0.0270	3.17	0.37	6.46	35.77	2.79	0.40
GEOM. STD. DEV.	2.6359	2.64	2.42	2.06	2.44	1.73	1.00
1ST QUARTILE	0.0045	1.50	0.20	4.01	19.42	1.81	0.40
2ND QUARTILE	0.0115	2.50	0.20	6.48	31.59	2.32	0.40
3RD QUARTILE	0.0240	8.00	0.65	9.97	61.41	3.66	0.40
VOL. WGT. MEAN	0.0105	4.34	0.35	6.95	38.87	2.39	0.40

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	11	11	12
MAXIMUM	229.20	2.22	0.67
MINIMUM	8.72	0.29	0.02
RANGE	220.48	1.93	0.65
ARITH. MEAN	61.89	1.01	0.13
ARITH. STD. DEV	61.08	0.67	0.20
GEOM. MEAN	42.52	0.82	0.05
GEOM. STD. DEV.	2.54	1.97	3.51
1ST QUARTILE	16.24	0.50	0.02
2ND QUARTILE	44.67	0.56	0.03
3RD QUARTILE	72.25	1.46	0.14
VOL. WGT. MEAN	44.41	0.77	0.09

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : DEC 31,85 TO JAN 1,87

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	11	10	10	10	11	11	11
MAXIMUM :	100.0	20.2	5.96	0.0309	0.0558	3.90	0.970
MINIMUM :	7.8	6.2	4.51	0.0011	0.0160	0.65	0.150
RANGE :	92.2	14.0	1.45	0.0298	0.0398	3.25	0.820
ARITH. MEAN :	44.7	11.1	5.15	0.0130	0.0317	1.36	0.351
ARITH. STD. DEV :	34.0	5.1	0.57	0.0119	0.0133	0.94	0.252
GEOM. MEAN :	32.7	10.1	5.12	0.0070	0.0293	1.18	0.293
GEOM. STD. DEV. :	2.4	1.6	1.12	3.7425	1.5198	1.66	1.813
1ST QUARTILE :	13.8	6.7	4.57	0.0019	0.0205	0.82	0.160
2ND QUARTILE :	26.3	9.4	4.98	0.0113	0.0263	0.97	0.275
3RD QUARTILE :	64.2	13.8	5.69	0.0214	0.0396	1.35	0.340
VOL. WGT. MEAN :	*******	8.7	*******	0.0071	0.0265	1.05	0.236

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	10	11	9	10	11	11	10
MAXIMUM :	0.320	0.360	0.470	0.055	0.170	0.255	0.380
MINIMUM :	0.110	0.020	0.140	0.015	0.000	0.000	0.090
RANGE :	0.210	0.340	0.330	0.040	0.170	0.255	0.290
ARITH. MEAN :	0.228	0.139	0.312	0.030	0.032	0.089	0.239
ARITH. STD. DEV :	0.079	0.105	0.103	0.013	0.047	0.081	0.101
GEOM. MEAN :	0.213	0.100	0.295	0.028	0.031	0.087	0.218
GEOM. STD. DEV. :	1.499	2.519	1.459	1.483	2.504	2.534	1.616
1ST QUARTILE :	0.135	0.035	0.230	0.022	0.010	0.020	0.150
2ND QUARTILE :	0.245	0.120	0.310	0.025	0.017	0.060	0.230
3RD QUARTILE :	0.280	0.195	0.370	0.032	0.025	0.135	0.308
VOL. WGT. MEAN :	0.202	0.088	0.330	0.030	0.024	0.052	0.251

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. 834

PERIOD OF REPORT : DEC 31,85 TO JAN 1,87

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	9	11	11	11	11	11	11
MAXIMUM	0.0440	14.00	3.00	21.63	157.00	9.63	0.40
MINIMUM	0.0000	1.00	0.20	1.38	7.57	1.38	0.40
RANGE	0.0440	13.00	2.80	20.25	149.43	8.25	0.00
ARITH. MEAN	0.0148	4.18	0.50	8.33	47.11	4.25	0.40
ARITH. STD. DEV	0.0151	3.82	0.84	6.47	43.07	2.45	0.00
GEOM. MEAN	0.0371	3.05	0.30	6.04	34.20	3.61	0.40
GEOM. STD. DEV.	3.0896	2.27	2.30	2.45	2.32	1.87	1.00
1ST QUARTILE	0.0025	1.50	0.20	2.67	17.09	1.67	0.40
2ND QUARTILE	0.0085	2.50	0.20	5.27	30.48	3.82	0.40
3RD QUARTILE	0.0190	5.50	0.30	12.23	52.82	5.46	0.40
VOL. WGT. MEAN	0.0080	3.28	0.36	5.00	36.60	2.85	0.40

	ALUMINUM	COPPER	CADMIUN
	UG/L	UG/L	UG/L
# OF SAMPLES	11	11	11
MAXIMUM	211.40	4.00	0.11
MINIMUM	13.15	0.31	0.02
RANGE	198.25	3.69	0.09
ARITH. MEAN	74.51	1.90	0.04
ARITH. STD. DEV	61.04	1.15	0.03
GEOM. MEAN	53.12	1.53	0.03
GEOM. STD. DEV.	2.49	2.13	2.03
1ST QUARTILE	18.49	0.76	0.02
2ND QUARTILE	60.18	1.68	0.02
3RD QUARTILE	95.26	2.41	0.06
VOL. WGT. MEAN	52.93	1.78	0.04

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERALDTON/CUMULATIVE PRECIP. #30

PERIOD OF REPORT : JAN 1,86 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	12	9	9	9	13	13
MAXIMUM	155.0	20.0	5.05	0.0282	0.0564	2.85	0.380
MINIMUM	22.1	8.5	4.55	0.0089	0.0277	0.45	0.000
RANGE	132.9	11.5	0.50	0.0193	0.0287	2.40	0.380
ARITH. MEAN	59.0	12.7	4.68	0.0218	0.0421	1.22	0.184
ARITH. STD. DEV	35.3	3.4	0.15	0.0057	0.0083	0.67	0.114
GEOM. MEAN	51.5	12.3	4.68	0.0209	0.0414	1.07	0.197
GEOM. STD. DEV.	1.7	1.3	1.03	1.4095	1.2257	1.70	1.797
1ST QUARTILE	33.3	10.1	4.59	0.0202	0.0377	0.70	0.100
2ND QUARTILE	50.1	12.5	4.64	0.0221	0.0397	1.15	0.165
3RD QUARTILE	62.8	15.1	4.66	0.0232	0.0451	1.30	0.240
VOL. WGT. MEAN	********	12.7	********	0.0224	0.0431	1.23	0.189

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	11	9	13	10	11	11
MAXIMUM	0.520	0.310	0.590	0.070	0.185	0.235	0.490
MINIMUM	0.060	0.040	0.160	0.010	0.000	0.020	0.000
RANGE	0.460	0.270	0.430	0.060	0.185	0.215	0.490
ARITH. MEAN	0.188	0.148	0.322	0.033	0.030	0.096	0.121
ARITH. STD. DEV	0.135	0.081	0.156	0.020	0.057	0.067	0.165
GEOM. MEAN	0.153	0.127	0.292	0.027	0.064	0.076	0.054
GEOM. STD. DEV.	1.918	1.848	1.589	1.902	4.453	2.115	6.321
1ST QUARTILE	0.100	0.070	0.195	0.015	0.000	0.040	0.005
2ND QUARTILE	0.105	0.135	0.260	0.027	0.008	0.065	0.022
3RD QUARTILE	0.225	0.180	0.345	0.042	0.025	0.123	0.155
VOL. WGT. MEAN	0.178	0.138	0.324	0.034	0.043	0.080	0.149

****** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERALDTON/CUMULATIVE PRECIP. #30

PERIOD OF REPORT : JAN 1,86 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	10	12	12	12	12	12	12
MAXIMUM	0.0530	8.00	1.40	43.20	88.59	12.27	0.40
MINIMUM	0.0000	1.00	0.20	1.41	11.52	1.38	0.40
RANGE	0.0530	7.00	1.20	41.79	77.07	10.89	0.00
ARITH. MEAN	0.0162	3.17	0.32	9.67	34.92	4.83	0.40
ARITH. STD. DEV	0.0165	2.79	0.34	11.23	22.69	3.81	0.00
GEOM. MEAN	0.0164	2.18	0.25	6.42	29.02	3.69	0.40
GEOM. STD. DEV.	2.7685	2.45	1.76	2.49	1.89	2.13	1.00
1ST QUARTILE	0.0030	1.00	0.20	3.76	17.81	2.04	0.40
2ND QUARTILE	0.0120	1.50	0.20	6.00	27.19	3.04	0.40
3RD QUARTILE	0.0200	6.00	0.25	11.60	47.50	8.06	0.40
VOL. WGT. MEAN	0.0136	3.33	0.25	9.46	33.29	4.29	0.40

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	12	10	12
MAXIMUM	132.30	4.21	0.16
MINIMUM	13.22	0.39	0.02
RANGE	119.08	3.82	0.14
ARITH. MEAN	44.72	1.44	0.07
ARITH. STD. DEV	36.20	1.26	0.06
GEOM. MEAN	35.48	1.04	0.05
GEOM. STD. DEV.	1.96	2.33	2.56
1ST QUARTILE	21.34	0.47	0.02
2ND QUARTILE	35.43	0.86	0.04
3RD QUARTILE	44.69	1.90	0.13
VOL. WGT. MEAN	37.57	1.14	0.06

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. 817

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	137.0	42.7	4.71	0.0891	0.1350	4.50	0.760
MINIMUM	26.0	10.9	4.05	0.0195	0.0388	0.60	0.220
RANGE	111.0	31.8	0.66	0.0696	0.0962	3.90	0.540
ARITH. MEAN	57.3	23.6	4.41	0.0430	0.0690	2.13	0.436
ARITH. STD. DEV	29.0	9.0	0.19	0.0201	0.0297	1.06	0.169
GEOM. MEAN	52.1	22.1	4.40	0.0392	0.0640	1.89	0.405
GEOM. STD. DEV.	1.5	1.5	1.05	1.5630	1.4863	1.71	1.502
1ST QUARTILE	39.0	17.9	4.24	0.0269	0.0465	1.32	0.280
2ND QUARTILE	49.0	19.6	4.40	0.0340	0.0574	1.90	0.410
3RD QUARTILE	61.0	29.9	4.53	0.0513	0.0792	2.52	0.550
VOL. WGT. MEAN	*******	21.7	*******	0.0391	0.0625	2.03	0.383

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.510	0.380	0.690	0.080	0.065	0.190	0.575
MINIMUM	0.060	0.050	0.050	0.010	0.000	0.000	0.050
RANGE	0.450	0.330	0.640	0.070	0.065	0.190	0.525
ARITH. MEAN	0.215	0.136	0.304	0.033	0.023	0.053	0.230
ARITH. STD. DEV	0.128	0.089	0.160	0.021	0.017	0.052	0.150
GEOM. MEAN	0.184	0.115	0.258	0.027	0.028	0.050	0.184
GEOM. STD. DEV.	1.806	1.793	1.949	2.025	2.149	2.578	2.108
1ST QUARTILE	0.115	0.075	0.220	0.012	0.010	0.012	0.115
2ND QUARTILE	0.195	0.100	0.295	0.030	0.022	0.032	0.190
3RD QUARTILE	0.230	0.165	0.340	0.042	0.032	0.062	0.282
VOL. WGT. MEAN	0.207	0.117	0.287	0.031	0.025	0.043	0.217

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. 817

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0190	5.00	0.80	8.67	48.54	8.47	0.50
MINIMUM	0.0000	1.00	0.20	1.43	8.86	1.30	0.40
RANGE	0.0190	4.00	0.60	7.23	39.68	7.17	0.10
ARITH. MEAN	0.0074	2.54	0.30	4.65	23.26	3.81	0.41
ARITH. STD. DEV	0.0059	1.51	0.19	2.15	11.71	2.00	0.03
GEOM. MEAN	0.0145	2.14	0.26	4.18	20.53	3.33	0.41
GEOM. STD. DEV.	2.9842	1.87	1.62	1.65	1.71	1.75	1.06
1ST QUARTILE	0.0015	1.00	0.20	3.11	12.57	2.08	0.40
2ND QUARTILE	0.0075	2.00	0.20	3.76	22.53	3.46	0.40
3RD QUARTILE	0.0100	3.50	0.25	5.82	28.33	4.53	0.40
VOL. WGT. MEAN	0.0068	2.38	0.27	4.14	20.05	3.80	0.42

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	13	13	13
MAXIMUM	44.79	2.69	0.15
MINIMUM	8.48	0.26	0.02
RANGE	36.31	2.43	0.13
ARITH. MEAN	25.91	1.00	0.04
ARITH. STD. DEV	11.65	0.67	0.04
GEOM. MEAN	23.10	0.81	0.03
GEOM. STD. DEV.	1.69	1.97	1.85
1ST QUARTILE	14.27	0.43	0.02
2ND QUARTILE	25.92	0.86	0.02
3RD QUARTILE	33.94	1.16	0.04
VOL. WGT. MEAN	22.86	0.93	0.04

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOGGANDA/CUMULATIVE PRECIP. 825

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	12	12	13	13	13
MAXIMUM	84.0	29.1	5.02	0.0457	0.0905	2.90	0.580
MINIMUM	12.0	7.8	4.34	0.0095	0.0292	0.95	0.060
RANGE	72.0	21.3	0.68	0.0362	0.0613	1.95	0.520
ARITH. MEAN	51.8	19.2	4.51	0.0337	0.0582	1.88	0.275
ARITH. STD. DEV	24.3	6.4	0.20	0.0116	0.0168	0.67	0.155
GEOM. MEAN	45.1	18.1	4.50	0.0311	0.0558	1.76	0.235
GEOM. STD. DEV.	1.8	1.5	1.04	1.5861	1.3593	1.47	1.843
1ST QUARTILE	27.5	14.0	4.36	0.0234	0.0430	1.15	0.165
2ND QUARTILE	49.0	18.6	4.42	0.0380	0.0579	1.77	0.220
3RD QUARTILE	71.0	23.1	4.63	0.0432	0.0646	2.25	0.305
VOL. WGT. MEAN	********	17.7	********	0.0326	0.0539	1.84	0.230

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.230	0.230	2.350	0.055	0.070	0.175	0.375
MINIMUM	0.000	0.040	0.150	0.005	0.000	0.005	0.005
RANGE	0.230	0.190	2.200	0.050	0.070	0.170	0.370
ARITH. MEAN	0.124	0.098	0.438	0.023	0.029	0.055	0.183
ARITH. STD. DEV	0.068	0.061	0.587	0.016	0.019	0.058	0.110
GEOM. MEAN	0.137	0.083	0.304	0.018	0.035	0.029	0.134
GEOM. STD. DEV.	1.927	1.785	2.095	2.194	2.053	3.502	3.004
1ST QUARTILE	0.075	0.050	0.170	0.010	0.015	0.010	0.113
2ND QUARTILE	0.130	0.075	0.280	0.017	0.030	0.020	0.145
3RD QUARTILE	0.160	0.105	0.310	0.030	0.035	0.075	0.238
VOL. WGT. MEAN	0.121	0.079	0.511	0.021	0.031	0.039	0.186

****** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/CUMULATIVE PRECIP. 825

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0230	6.00	1.10	14.07	50.42	14.34	0.50
MINIMUM	0.0000	1.00	0.20	1.44	5.96	1.44	0.40
RANGE	0.0230	5.00	0.90	12.63	44.45	12.90	0.10
ARITH. MEAN	0.0080	2.23	0.34	6.29	23.24	4.28	0.41
ARITH. STD. DEV	0.0075	1.48	0.27	3.73	14.73	3.51	0.03
GEOM. MEAN	0.0134	1.87	0.28	5.15	19.05	3.40	0.41
GEOM. STD. DEV.	3.5206	1.83	1.79	2.04	1.96	1.96	1.06
1ST QUARTILE	0.0010	1.00	0.20	3.20	11.11	2.00	0.40
2ND QUARTILE	0.0055	2.00	0.20	5.62	17.41	3.06	0.40
3RD QUARTILE	0.0115	2.50	0.25	7.63	34.01	4.64	0.40
VOL. WGT. MEAN	0.0061	2.19	0.29	5.70	21.18	4.35	0.41

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13
MAXIMUM	89.06	12.56	0.20
MINIMUM	10.41	0.29	0.02
RANGE	78.65	12.27	0.18
ARITH. MEAN	41.27	2.21	0.07
ARITH. STD. DEV	25.52	3.26	0.06
GEOM. MEAN	33.50	1.19	0.05
GEOM. STD. DEV.	2.03	3.01	2.53
1ST QUARTILE	16.23	0.44	0.02
2ND QUARTILE	33.65	1.07	0.02
3RD QUARTILE	53.11	2.30	0.10
VOL. WGT. MEAN	33.57	1.77	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HURON PARK/CUMULATIVE PRECIP. 806

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	283.2	42.1	4.97	0.0776	0.1130	4.50	0.890
MINIMUM	17.0	13.5	4.11	0.0107	0.0359	1.40	0.350
RANGE	266.2	28.6	0.86	0.0669	0.0771	3.10	0.540
ARITH. MEAN	89.7	29.6	4.36	0.0486	0.0748	3.29	0.550
ARITH. STD. DEV	72.7	8.2	0.25	0.0203	0.0216	0.87	0.155
GEOM. MEAN	69.6	28.4	4.36	0.0432	0.0716	3.16	0.532
GEOM. STD. DEV.	2.1	1.4	1.06	1.7630	1.3768	1.37	1.307
1ST QUARTILE	43.8	24.4	4.19	0.0338	0.0588	2.67	0.430
2ND QUARTILE	65.1	28.9	4.28	0.0479	0.0742	3.30	0.535
3RD QUARTILE	88.6	34.8	4.38	0.0596	0.0833	3.97	0.560
VOL. WGT. MEAN	*******	30.8	*******	0.0535	0.0789	3.38	0.498

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.840	0.380	1.050	0.150	0.075	0.110	0.825
MINIMUM	0.210	0.090	0.290	0.035	0.015	0.010	0.210
RANGE	0.630	0.290	0.760	0.115	0.060	0.100	0.615
ARITH. MEAN	0.429	0.194	0.627	0.070	0.037	0.060	0.489
ARITH. STD. DEV	0.186	0.081	0.232	0.032	0.019	0.035	0.186
GEOM. MEAN	0.395	0.180	0.589	0.064	0.032	0.048	0.457
GEOM. STD. DEV.	1.524	1.497	1.449	1.516	1.742	2.142	1.477
1ST QUARTILE	0.290	0.125	0.475	0.045	0.020	0.025	0.350
2ND QUARTILE	0.370	0.175	0.535	0.067	0.032	0.050	0.462
3RD QUARTILE	0.490	0.215	0.745	0.075	0.047	0.087	0.495
VOL. WGT. MEAN	0.343	0.179	0.593	0.058	0.039	0.060	0.471

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HURON PARK/CUMULATIVE PRECIP. #06

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0200	17.00	3.10	22.41	276.40	25.62	1.20
MINIMUM	0.0000	1.00	0.20	5.39	13.08	2.14	0.40
RANGE	0.0200	16.00	2.90	17.02	263.32	23.48	0.80
ARITH. MEAN	0.0077	4.38	0.53	14.02	52.80	6.63	0.50
ARITH. STD. DEV	0.0059	4.05	0.83	5.69	69.88	6.86	0.25
GEOM. MEAN	0.0152	3.42	0.31	12.91	35.28	4.67	0.46
GEOM. STD. DEV.	2.9399	1.99	2.37	1.54	2.24	2.24	1.44
1ST QUARTILE	0.0015	2.00	0.20	9.86	19.11	2.31	0.40
2ND QUARTILE	0.0080	3.00	0.20	10.53	31.26	3.40	0.40
3RD QUARTILE	0.0105	4.50	0.30	18.44	36.75	6.32	0.40
VOL. WGT. MEAN	0.0054	3.28	0.60	12.28	37.73	5.05	0.45

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	12	13	13
MAXIMUM	124.70	3.16	0.19
MINIMUM	8.81	0.26	0.02
RANGE	115.89	2.90	0.17
ARITH. MEAN	42.65	1.34	0.08
ARITH. STD. DEV	36.82	1.05	0.06
GEOM. MEAN	31.78	0.92	0.05
GEOM. STD. DEV.	2.20	2.62	2.46
1ST QUARTILE	18.66	0.29	0.02
2ND QUARTILE	33.69	0.91	0.05
3RD QUARTILE	44.50	2.06	0.11
VOL. WGT. MEAN	32.48	1.24	0.07

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : KILLARNEY/CUMULATIVE PRECIP. 823

PERIOD OF REPORT : DEC 30,85 TO JAN 4,87

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	87.0	54.2	6.85	0.1230	0.1470	5.35	1.280
MINIMUM :	9.6	12.3	3.91	0.0001	0.0188	1.40	0.000
RANGE :	77.4	41.9	2.94	0.1229	0.1282	3.95	1.280
ARITH. MEAN :	53.2	30.2	4.47	0.0539	0.0803	2.74	0.562
ARITH. STD. DEV :	23.8	12.5	0.74	0.0296	0.0327	1.02	0.350
GEOM. MEAN :	46.6	27.6	4.43	0.0339	0.0727	2.58	0.558
GEOM. STD. DEV. :	1.8	1.6	1.15	5.4722	1.6766	1.43	1.717
1ST QUARTILE :	34.0	21.3	4.14	0.0417	0.0621	1.82	0.275
2ND QUARTILE :	50.9	27.5	4.29	0.0468	0.0739	2.73	0.520
3RD QUARTILE :	65.6	37.6	4.38	0.0677	0.0971	3.00	0.735
VOL. WGT. MEAN :	#######	30.3	#######	0.0543	0.0800	2.73	0.564

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	12	13	12	12	12	12	13
MAXIMUM :	0.370	0.380	0.910	0.055	0.060	0.270	0.715
MINIMUM :	0.070	0.040	0.080	0.010	0.000	0.015	0.000
RANGE :	0.300	0.340	0.830	0.045	0.060	0.255	0.715
ARITH. MEAN :	0.209	0.146	0.487	0.035	0.027	0.063	0.358
ARITH. STD. DEV :	0.094	0.102	0.249	0.013	0.018	0.076	0.234
GEOM. MEAN :	0.187	0.120	0.408	0.031	0.035	0.041	0.324
GEOM. STD. DEV. :	1.683	1.924	2.023	1.653	2.008	2.439	2.460
1ST QUARTILE :	0.150	0.075	0.340	0.025	0.020	0.020	0.122
2ND QUARTILE :	0.200	0.120	0.450	0.040	0.025	0.037	0.390
3RD QUARTILE :	0.280	0.145	0.680	0.042	0.030	0.057	0.460
VOL. WGT. MEAN :	0.192	0.127	0.493	0.031	0.024	0.045	0.365

: INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : KILLARNEY/CUMULATIVE PRECIP. 023

PERIOD OF REPORT : DEC 30,85 TO JAN 4,87

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	12	13	13	13	13	13	13
MAXIMUM	0.0180	5.00	3.30	133.30	240.40	7.68	0.80
MINIMUM	0.0000	1.00	0.20	1.37	7.07	1.58	0.40
RANGE	0.0180	4.00	3.10	131.93	233.32	6.09	0.40
ARITH. MEAN	0.0063	2.38	0.75	17.34	46.46	4.12	0.47
ARITH. STD. DEV	0.0056	1.45	0.91	35.07	61.05	2.01	0.13
GEOM. MEAN	0.0148	1.99	0.47	8.24	29.14	3.62	0.46
GEOM. STD. DEV.	2.6449	1.89	2.50	2.84	2.55	1.74	1.27
1ST QUARTILE	0.0030	1.00	0.20	5.17	13.15	2.03	0.40
2ND QUARTILE	0.0050	2.00	0.40	7.02	32.84	3.78	0.40
3RD QUARTILE	0.0075	3.50	0.65	9.08	40.52	5.53	0.45
VOL. WGT. MEAN	0.0049	2.39	0.76	8.82	31.19	4.08	0.45

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13
MAXIMUM	119.90	9.25	0.23
MINIMUM	8.25	0.32	0.02
RANGE	111.65	8.94	0.21
ARITH. MEAN	41.49	1.85	0.09
ARITH. STD. DEV	35.30	2.46	0.08
GEOM. MEAN	30.19	1.03	0.06
GEOM. STD. DEV.	2.30	2.92	2.71
1ST QUARTILE	13.81	0.36	0.02
2ND QUARTILE	29.11	0.83	0.06
3RD QUARTILE	44.24	1.92	0.11
VOL. WGT. MEAN	32.39	2.05	0.08

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/CUMULATIVE PRECIP. 833

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	10	10	8	8	10	10	10
MAXIMUM	150.0	21.2	5.47	0.0324	0.0561	2.60	0.350
MINIMUM	14.8	7.0	4.49	0.0034	0.0210	0.55	0.000
RANGE	135.2	14.2	0.98	0.0290	0.0351	2.05	0.350
ARITH. MEAN	45.6	12.0	4.93	0.0155	0.0357	1.21	0.218
ARITH. STD. DEV	38.9	4.9	0.37	0.0107	0.0130	0.57	0.115
GEOM. MEAN	36.8	11.2	4.92	0.0118	0.0337	1.11	0.259
GEOM. STD. DEV.	1.9	1.5	1.08	2.3295	1.4343	1.54	1.591
1ST QUARTILE	23.3	7.6	4.60	0.0067	0.0230	0.77	0.120
2ND QUARTILE	32.8	11.0	4.91	0.0124	0.0330	1.13	0.225
3RD QUARTILE	43.5	14.1	5.22	0.0249	0.0415	1.35	0.295
VOL. WGT. MEAN	*******	11.8	*******	0.0110	0.0318	1.22	0.201

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	9	9	6	9	9	9	9
MAXIMUM	0.540	0.780	0.800	0.095	0.425	0.840	0.360
MINIMUM	0.080	0.030	0.180	0.015	0.005	0.005	0.010
RANGE	0.460	0.750	0.620	0.080	0.420	0.835	0.350
ARITH. MEAN	0.220	0.214	0.428	0.038	0.088	0.189	0.143
ARITH. STD. DEV	0.139	0.252	0.233	0.024	0.141	0.275	0.117
GEOM. MEAN	0.189	0.128	0.376	0.032	0.032	0.065	0.083
GEOM. STD. DEV.	1.774	2.828	1.777	1.780	4.309	5.489	3.813
1ST QUARTILE	0.125	0.065	0.195	0.020	0.012	0.015	0.027
2ND QUARTILE	0.160	0.090	0.410	0.032	0.015	0.060	0.110
3RD QUARTILE	0.245	0.165	0.510	0.037	0.050	0.170	0.205
VOL. WGT. MEAN	0.187	0.150	0.428	0.033	0.073	0.120	0.219

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/CUMULATIVE PRECIP. #33

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	7	7	8	8	8	8	8
MAXIMUM	0.0950	9.00	1.90	53.35	111.50	12.35	0.40
MINIMUM	0.0000	1.00	0.20	2.11	19.14	1.36	0.40
RANGE	0.0950	8.00	1.70	51.24	92.36	10.99	0.00
ARITH. MEAN	0.0169	2.86	0.71	13.81	39.31	5.33	0.40
ARITH. STD. DEV	0.0348	2.85	0.65	17.30	30.74	3.88	0.00
GEOM. MEAN	0.0845	2.07	0.49	7.75	32.94	4.11	0.40
GEOM. STD. DEV.	6.0700	2.27	2.54	3.07	1.77	2.23	1.00
1ST QUARTILE	0.0000	1.00	0.20	3.01	22.81	1.96	0.40
2ND QUARTILE	0.0025	1.50	0.40	6.46	27.99	4.64	0.40
3RD QUARTILE	0.0090	3.00	1.20	18.03	41.10	7.88	0.40
VOL. WGT. MEAN	0.0104	2.56	0.51	9.00	32.45	4.04	0.40

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	8	7	8
MAXIMUM	121.50	20.11	1.57
MINIMUM	15.97	0.27	0.02
RANGE	105.53	19.84	1.55
ARITH. MEAN	44.75	4.93	0.24
ARITH. STD. DEV	34.49	7.18	0.54
GEOM. MEAN	36.46	1.79	0.06
GEOM. STD. DEV.	1.92	5.10	4.38
1ST QUARTILE	23.15	0.32	0.02
2ND QUARTILE	32.78	1.19	0.05
3RD QUARTILE	54.33	5.70	0.09
VOL. WGT. MEAN	34.22	2.33	0.09

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MATTAWA/CUMULATIVE PRECIP. #22

PERIOD OF REPORT : JAN 28,86 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	12	12	10	10	11	12	12
MAXIMUM :	113.0	46.2	4.55	0.0912	0.1400	4.30	0.920
MINIMUM :	14.0	10.4	4.04	0.0282	0.0337	0.80	0.210
RANGE :	99.0	35.8	0.51	0.0630	0.1063	3.50	0.710
ARITH. MEAN :	67.3	23.8	4.37	0.0466	0.0698	2.36	0.452
ARITH. STD. DEV :	28.6	9.9	0.18	0.0219	0.0306	1.12	0.222
GEOM. MEAN :	59.6	22.1	4.36	0.0429	0.0646	2.13	0.406
GEOM. STD. DEV. :	1.8	1.5	1.04	1.5150	1.5020	1.61	1.625
1ST QUARTILE :	53.1	17.9	4.18	0.0299	0.0471	1.70	0.260
2ND QUARTILE :	66.6	21.1	4.43	0.0368	0.0569	1.88	0.380
3RD QUARTILE :	87.6	27.3	4.49	0.0514	0.0802	3.30	0.585
VOL. WGT. MEAN :	*******	22.8	*******	0.0439	0.0653	2.38	0.417

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	12	12	10	12	12	12	10
MAXIMUM :	0.470	0.230	0.620	0.100	0.235	0.125	0.610
MINIMUM :	0.000	0.040	0.210	0.010	0.005	0.000	0.055
RANGE :	0.470	0.190	0.410	0.090	0.230	0.125	0.555
ARITH. MEAN :	0.214	0.123	0.360	0.037	0.058	0.048	0.223
ARITH. STD. DEV :	0.136	0.062	0.136	0.027	0.065	0.035	0.167
GEOM. MEAN :	0.235	0.108	0.338	0.030	0.037	0.056	0.176
GEOM. STD. DEV. :	1.685	1.754	1.445	2.031	2.744	1.959	2.077
1ST QUARTILE :	0.115	0.075	0.230	0.020	0.022	0.022	0.092
2ND QUARTILE :	0.185	0.110	0.335	0.027	0.030	0.037	0.185
3RD QUARTILE :	0.310	0.165	0.425	0.045	0.070	0.070	0.267
VOL. WGT. MEAN :	0.205	0.111	0.356	0.034	0.055	0.041	0.234

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MATTAWA/CUMULATIVE PRECIP. #22

PERIOD OF REPORT : JAN 28,86 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	10	11	11	11	11	11	11
MAXIMUM	0.0480	19.00	2.00	17.48	902.00	6.30	1.50
MINIMUM	0.0000	1.00	0.20	2.29	10.18	1.26	0.40
RANGE	0.0480	18.00	1.80	15.19	891.82	5.04	1.10
ARITH. MEAN	0.0135	4.36	0.58	7.66	123.23	3.50	0.57
ARITH. STD. DEV	0.0153	5.16	0.55	4.80	259.37	1.68	0.39
GEOM. MEAN	0.0150	2.94	0.42	6.31	50.24	3.12	0.50
GEOM. STD. DEV.	2.9714	2.35	2.26	1.97	3.22	1.67	1.64
1ST QUARTILE	0.0025	1.50	0.20	2.61	20.89	1.95	0.40
2ND QUARTILE	0.0070	2.50	0.30	6.94	42.31	2.91	0.40
3RD QUARTILE	0.0150	4.00	0.70	9.09	70.50	4.88	0.40
VOL. WGT. MEAN	0.0128	5.05	0.48	6.38	155.94	3.42	0.59

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	11	11	11
MAXIMUM	622.60	3.76	0.87
MINIMUM	11.92	0.40	0.02
RANGE	610.68	3.36	0.85
ARITH. MEAN	93.29	1.12	0.11
ARITH. STD. DEV	176.91	0.94	0.25
GEOM. MEAN	43.61	0.91	0.04
GEOM. STD. DEV.	3.00	1.86	3.22
1ST QUARTILE	16.30	0.58	0.02
2ND QUARTILE	43.35	0.73	0.02
3RD QUARTILE	61.80	1.16	0.05
VOL. WGT. MEAN	113.02	0.95	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MCKELLAR/CUMULATIVE PRECIP. 821

PERIOD OF REPORT : DEC 31,85 TO DEC 29,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	12	12	12	12	13	13
MAXIMUM	141.8	53.5	4.65	0.1148	0.1390	6.15	1.050
MINIMUM	22.6	13.8	3.94	0.0224	0.0392	1.15	0.220
RANGE	118.4	39.7	0.71	0.0924	0.0998	5.00	0.830
ARITH. MEAN	70.0	27.0	4.39	0.0456	0.0706	2.46	0.525
ARITH. STD. DEV	33.0	12.5	0.21	0.0261	0.0301	1.31	0.257
GEOM. MEAN	62.2	24.8	4.39	0.0405	0.0657	2.21	0.469
GEOM. STD. DEV.	1.7	1.5	1.05	1.6338	1.4732	1.59	1.653
1ST QUARTILE	49.5	17.8	4.27	0.0260	0.0473	1.52	0.270
2ND QUARTILE	65.3	22.4	4.36	0.0417	0.0650	2.10	0.520
3RD QUARTILE	77.0	34.8	4.59	0.0537	0.0851	2.72	0.570
VOL. WGT. MEAN	*******	23.0	*******	0.0392	0.0627	2.12	0.462

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	12	11	13	13	12	13
MAXIMUM	0.360	0.410	0.840	0.070	0.180	0.235	0.705
MINIMUM	0.060	0.060	0.170	0.010	0.005	0.010	0.165
RANGE	0.300	0.350	0.670	0.060	0.175	0.225	0.540
ARITH. MEAN	0.212	0.160	0.490	0.040	0.057	0.072	0.412
ARITH. STD. DEV	0.098	0.099	0.244	0.018	0.061	0.079	0.193
GEOM. MEAN	0.187	0.138	0.434	0.035	0.034	0.044	0.369
GEOM. STD. DEV.	1.737	1.741	1.700	1.759	3.043	2.789	1.650
1ST QUARTILE	0.140	0.110	0.280	0.025	0.012	0.022	0.220
2ND QUARTILE	0.190	0.135	0.370	0.040	0.032	0.045	0.370
3RD QUARTILE	0.265	0.165	0.715	0.047	0.047	0.070	0.515
VOL. WGT. MEAN	0.183	0.151	0.414	0.034	0.042	0.068	0.357

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MCKELLAR/CUMULATIVE PRECIP. #21

PERIOD OF REPORT : DEC 31,85 TO DEC 29,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	11	11	12	11	11	12	11
MAXIMUM	0.0270	4.00	0.90	28.71	79.69	6.81	0.50
MINIMUM	0.0000	1.00	0.20	1.27	13.71	1.23	0.40
RANGE	0.0270	3.00	0.70	27.44	65.98	5.57	0.10
ARITH. MEAN	0.0069	2.45	0.35	8.85	32.71	3.44	0.41
ARITH. STD. DEV	0.0075	1.04	0.27	9.11	18.36	1.86	0.03
GEOM. MEAN	0.0060	2.23	0.28	5.54	29.00	2.98	0.41
GEOM. STD. DEV.	3.0359	1.61	1.87	2.81	1.65	1.78	1.07
1ST QUARTILE	0.0010	1.50	0.20	1.99	16.77	1.82	0.40
2ND QUARTILE	0.0060	2.00	0.20	4.51	27.73	3.26	0.40
3RD QUARTILE	0.0085	3.00	0.45	10.71	37.81	4.51	0.40
VOL. WGT. MEAN	0.0053	2.23	0.34	6.84	31.73	3.09	0.40

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	11	10	10
MAXIMUM	106.40	3.13	0.10
MINIMUM	8.26	0.36	0.02
RANGE	98.14	2.76	0.08
ARITH. MEAN	31.39	1.25	0.06
ARITH. STD. DEV	27.04	1.03	0.04
GEOM. MEAN	24.80	0.94	0.05
GEOM. STD. DEV.	1.98	2.16	2.12
1ST QUARTILE	13.65	0.51	0.02
2ND QUARTILE	22.51	0.71	0.06
3RD QUARTILE	31.45	1.68	0.09
VOL. WGT. MEAN	28.52	1.20	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HERLIN/CUMULATIVE PRECIP. 802

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	193.0	55.2	4.48	0.0851	0.1270	6.10	1.460
MINIMUM :	18.0	24.4	4.07	0.0331	0.0600	2.45	0.350
RANGE :	175.0	30.8	0.41	0.0520	0.0670	3.65	1.110
ARITH. MEAN :	74.2	36.0	4.22	0.0629	0.0899	3.92	0.655
ARITH. STD. DEV :	43.6	8.3	0.13	0.0168	0.0204	1.11	0.279
GEOM. MEAN :	63.6	35.2	4.22	0.0606	0.0878	3.78	0.613
GEOM. STD. DEV. :	1.8	1.3	1.03	1.3486	1.2539	1.33	1.435
1ST QUARTILE :	48.5	28.6	4.10	0.0496	0.0732	2.85	0.450
2ND QUARTILE :	63.8	34.8	4.19	0.0610	0.0863	3.95	0.595
3RD QUARTILE :	88.3	38.6	4.23	0.0768	0.0967	4.35	0.690
VOL. WGT. MEAN :	********	34.0	********	0.0605	0.0860	3.78	0.580

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	13	13	13	13	12	13	13
MAXIMUM :	1.190	1.080	1.430	0.215	0.130	0.675	0.700
MINIMUM :	0.180	0.140	0.260	0.035	0.015	0.010	0.245
RANGE :	1.010	0.940	1.170	0.180	0.115	0.665	0.455
ARITH. MEAN :	0.474	0.320	0.654	0.086	0.047	0.137	0.467
ARITH. STD. DEV :	0.292	0.266	0.332	0.054	0.030	0.195	0.166
GEOM. MEAN :	0.412	0.257	0.586	0.074	0.040	0.066	0.438
GEOM. STD. DEV. :	1.689	1.887	1.621	1.710	1.756	3.340	1.471
1ST QUARTILE :	0.300	0.160	0.395	0.055	0.027	0.030	0.290
2ND QUARTILE :	0.360	0.180	0.580	0.067	0.040	0.045	0.460
3RD QUARTILE :	0.480	0.370	0.730	0.082	0.055	0.100	0.587
VOL. WGT. MEAN :	0.406	0.267	0.629	0.078	0.047	0.103	0.448

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HERLIN/CUMULATIVE PRECIP. 802

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	13	12	12	12	12	12	12
MAXIMUM	0.0720	10.00	5.30	24.90	144.90	37.53	0.90
MINIMUM	0.0000	1.00	0.20	3.38	8.38	3.20	0.40
RANGE	0.0720	9.00	5.10	21.52	136.52	34.33	0.50
ARITH. MEAN	0.0154	4.42	0.79	11.10	51.95	8.95	0.47
ARITH. STD. DEV	0.0245	2.57	1.48	6.11	34.25	9.32	0.16
GEOM. MEAN	0.0189	3.75	0.36	9.80	43.10	6.91	0.45
GEOM. STD. DEV.	3.4687	1.87	2.87	1.68	1.97	1.92	1.31
1ST QUARTILE	0.0025	3.00	0.20	7.73	32.36	4.95	0.40
2ND QUARTILE	0.0070	3.50	0.20	9.48	43.07	6.65	0.40
3RD QUARTILE	0.0090	6.50	0.40	11.95	63.01	7.78	0.40
VOL. WGT. MEAN	0.0118	3.66	0.58	11.76	39.96	7.54	0.43

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	12	12	12
MAXIMUM	77.51	4.22	0.67
MINIMUM	6.15	0.27	0.02
RANGE	71.36	3.95	0.65
ARITH. MEAN	45.08	1.35	0.11
ARITH. STD. DEV	18.30	1.29	0.18
GEOM. MEAN	39.59	0.88	0.06
GEOM. STD. DEV.	1.90	2.67	2.81
1ST QUARTILE	36.39	0.34	0.03
2ND QUARTILE	44.65	0.72	0.06
3RD QUARTILE	55.40	1.96	0.11
VOL. WGT. MEAN	38.90	1.08	0.07

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOONBEAM/CUMULATIVE PRECIP. #27

PERIOD OF REPORT : DEC 31,85 TO DEC 29,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	11	10	10	10	10	10	10
MAXIMUM	70.0	25.0	7.06	0.0355	0.4350	5.00	0.540
MINIMUM	13.5	6.1	4.45	0.0001	0.0182	0.50	0.090
RANGE	56.5	18.9	2.61	0.0354	0.4168	4.50	0.450
ARITH. MEAN	42.1	14.5	5.05	0.0152	0.0742	1.91	0.267
ARITH. STD. DEV	17.8	5.9	0.74	0.0101	0.1274	1.31	0.158
GEOM. MEAN	38.0	13.5	5.01	0.0089	0.0415	1.61	0.225
GEOM. STD. DEV.	1.6	1.5	1.14	5.5079	2.4582	1.85	1.890
1ST QUARTILE	24.8	10.0	4.66	0.0069	0.0237	1.25	0.125
2ND QUARTILE	41.8	13.0	4.83	0.0148	0.0347	1.48	0.215
3RD QUARTILE	55.0	16.5	5.06	0.0193	0.0397	1.72	0.375
VOL. WGT. MEAN	########	13.5	########	0.0163	0.0548	1.69	0.231

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	10	10	10	10	10	10	10
MAXIMUM	2.460	0.700	0.860	0.490	0.105	0.480	0.640
MINIMUM	0.040	0.040	0.080	0.005	0.000	0.000	0.030
RANGE	2.420	0.660	0.780	0.485	0.105	0.480	0.610
ARITH. MEAN	0.447	0.157	0.322	0.084	0.043	0.098	0.238
ARITH. STD. DEV	0.740	0.198	0.236	0.147	0.030	0.140	0.182
GEOM. MEAN	0.204	0.104	0.251	0.036	0.057	0.067	0.173
GEOM. STD. DEV.	3.395	2.360	2.152	3.612	1.910	2.672	2.532
1ST QUARTILE	0.085	0.050	0.105	0.015	0.020	0.020	0.077
2ND QUARTILE	0.175	0.105	0.265	0.032	0.037	0.062	0.235
3RD QUARTILE	0.260	0.125	0.405	0.045	0.057	0.080	0.313
VOL. WGT. MEAN	0.322	0.120	0.294	0.059	0.039	0.073	0.216

: INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HOOMBEAM/CUMULATIVE PRECIP. #27

PERIOD OF REPORT : DEC 31,85 TO DEC 29,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	10	9	9	9	9	9	9
MAXIMUM	0.0290	10.00	0.40	25.73	86.59	20.53	0.50
MINIMUM	0.0010	1.00	0.20	1.52	6.63	1.52	0.40
RANGE	0.0280	9.00	0.20	24.21	79.96	19.01	0.10
ARITH. MEAN	0.0112	3.44	0.27	8.28	31.48	4.50	0.41
ARITH. STD. DEV	0.0092	3.00	0.09	7.82	24.96	6.13	0.03
GEOM. MEAN	0.0077	2.56	0.26	5.47	23.68	2.90	0.41
GEOM. STD. DEV.	2.7466	2.21	1.36	2.76	2.29	2.32	1.08
1ST QUARTILE	0.0040	1.50	0.20	1.66	11.17	1.65	0.40
2ND QUARTILE	0.0075	2.00	0.20	6.86	23.55	1.87	0.40
3RD QUARTILE	0.0160	3.50	0.30	7.58	37.13	3.23	0.40
VOL. WGT. MEAN	0.0121	2.85	0.25	7.45	25.30	4.26	0.42

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	9	9	9
MAXIMUM	121.00	17.35	0.69
MINIMUM	9.11	0.30	0.02
RANGE	111.89	17.05	0.67
ARITH. MEAN	44.65	3.32	0.20
ARITH. STD. DEV	43.28	5.39	0.28
GEOM. MEAN	30.08	1.58	0.07
GEOM. STD. DEV.	2.56	3.28	4.77
1ST QUARTILE	13.92	0.77	0.02
2ND QUARTILE	24.66	0.97	0.02
3RD QUARTILE	39.62	2.48	0.16
VOL. WGT. MEAN	40.86	2.91	0.16

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOOSONEE/CUMULATIVE PRECIP. 839

PERIOD OF REPORT : DEC 29,85 TO AUG 12,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	5	5	4	4	5	5	5
MAXIMUM	165.0	22.3	4.95	0.0457	0.0740	2.35	0.560
MINIMUM	3.5	5.3	4.34	0.0112	0.0114	0.35	0.070
RANGE	161.5	17.0	0.61	0.0345	0.0626	2.00	0.490
ARITH. MEAN	57.9	15.2	4.68	0.0245	0.0379	1.32	0.228
ARITH. STD. DEV	64.1	7.4	0.28	0.0157	0.0249	0.71	0.193
GEOM. MEAN	30.6	13.3	4.67	0.0210	0.0312	1.13	0.179
GEOM. STD. DEV.	4.2	1.9	1.06	1.8905	2.0704	2.02	2.139
1ST QUARTILE	11.5	7.3	4.45	0.0127	0.0169	0.80	0.100
2ND QUARTILE	28.0	14.1	4.71	0.0205	0.0264	1.27	0.150
3RD QUARTILE	50.8	19.6	4.90	0.0363	0.0409	1.32	0.190
VOL. WGT. MEAN	*******	10.6	*******	0.0156	0.0305	1.07	0.177

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	4	5	5	4	5	5	5
MAXIMUM	0.270	0.470	0.320	0.055	0.040	0.265	0.250
MINIMUM	0.040	0.070	0.070	0.010	0.015	0.035	0.005
RANGE	0.230	0.400	0.250	0.045	0.025	0.230	0.245
ARITH. MEAN	0.172	0.226	0.218	0.034	0.026	0.136	0.128
ARITH. STD. DEV	0.104	0.170	0.112	0.018	0.011	0.096	0.100
GEOM. MEAN	0.138	0.172	0.188	0.029	0.024	0.104	0.070
GEOM. STD. DEV.	2.396	2.382	1.938	2.082	1.515	2.394	4.947
1ST QUARTILE	0.090	0.070	0.100	0.023	0.017	0.042	0.027
2ND QUARTILE	0.190	0.140	0.195	0.035	0.020	0.095	0.097
3RD QUARTILE	0.255	0.260	0.285	0.045	0.027	0.165	0.167
VOL. WGT. MEAN	0.209	0.129	0.227	0.032	0.022	0.080	0.151

****** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOOSONEE/CUMULATIVE PRECIP. #39

PERIOD OF REPORT : DEC 29,85 TO AUG 12,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	5	5	5	5	5	5	5
MAXIMUM	0.0150	2.00	3.90	26.83	67.72	4.62	0.40
MINIMUM	0.0000	1.00	0.20	1.22	12.22	1.43	0.40
RANGE	0.0150	1.00	3.70	25.61	55.50	3.18	0.00
ARITH. MEAN	0.0052	1.60	1.06	10.78	31.43	2.87	0.40
ARITH. STD. DEV	0.0059	0.55	1.60	10.58	24.10	1.40	0.00
GEOM. MEAN	0.0140	1.52	0.50	5.87	24.90	2.57	0.40
GEOM. STD. DEV.	3.7149	1.46	3.50	4.03	2.13	1.71	1.00
1ST QUARTILE	0.0010	1.00	0.20	1.35	12.81	1.45	0.40
2ND QUARTILE	0.0025	1.50	0.25	5.80	16.41	2.27	0.40
3RD QUARTILE	0.0045	2.00	0.50	12.18	31.90	3.40	0.40
VOL. WGT. MEAN	0.0021	1.76	0.70	3.83	20.78	1.98	0.40

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	5	5	5
MAXIMUM	140.20	2.65	0.62
MINIMUM	31.85	0.24	0.02
RANGE	108.35	2.40	0.60
ARITH. MEAN	74.63	1.45	0.23
ARITH. STD. DEV	45.57	1.12	0.25
GEOM. MEAN	64.31	0.95	0.11
GEOM. STD. DEV.	1.84	3.21	4.87
1ST QUARTILE	40.00	0.27	0.02
2ND QUARTILE	48.76	1.07	0.12
3RD QUARTILE	76.48	2.04	0.24
VOL. WGT. MEAN	63.28	0.69	0.11

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : OTTER ISLAND/CUMULATIVE PRECIP. #38

PERIOD OF REPORT : APR 22,86 TO NOV 4,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	7	7	7	7	7	7	7
MAXIMUM :	92.0	28.7	5.10	0.0513	0.0762	4.75	0.700
MINIMUM :	27.0	4.4	4.29	0.0079	0.0251	0.50	0.100
RANGE :	65.0	24.3	0.81	0.0433	0.0511	4.25	0.600
ARITH. MEAN :	64.0	18.5	4.64	0.0285	0.0514	2.44	0.343
ARITH. STD. DEV :	24.0	8.9	0.34	0.0176	0.0206	1.38	0.186
GEOM. MEAN :	59.5	15.9	4.63	0.0229	0.0474	2.01	0.299
GEOM. STD. DEV. :	1.5	1.9	1.07	2.1680	1.5658	2.11	1.812
1ST QUARTILE :	37.0	7.5	4.30	0.0082	0.0264	0.85	0.170
2ND QUARTILE :	56.5	18.4	4.48	0.0255	0.0493	2.38	0.290
3RD QUARTILE :	84.5	24.6	4.90	0.0405	0.0660	2.93	0.390
VOL. WGT. MEAN :	*******	16.8	*******	0.0265	0.0487	2.09	0.290

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	7	7	7	7	7	7	7
MAXIMUM :	0.940	0.160	0.890	0.160	0.055	0.055	0.810
MINIMUM :	0.160	0.030	0.050	0.015	0.000	0.000	0.060
RANGE :	0.780	0.130	0.840	0.145	0.055	0.055	0.750
ARITH. MEAN :	0.386	0.080	0.436	0.060	0.025	0.021	0.364
ARITH. STD. DEV :	0.280	0.041	0.256	0.050	0.021	0.018	0.229
GEOM. MEAN :	0.319	0.072	0.341	0.046	0.040	0.035	0.294
GEOM. STD. DEV. :	1.901	1.673	2.491	2.188	2.392	2.487	2.217
1ST QUARTILE :	0.175	0.045	0.185	0.023	0.005	0.002	0.155
2ND QUARTILE :	0.240	0.065	0.390	0.035	0.015	0.020	0.320
3RD QUARTILE :	0.465	0.090	0.505	0.072	0.040	0.025	0.395
VOL. WGT. MEAN :	0.314	0.069	0.363	0.047	0.020	0.017	0.301

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : OTTER ISLAND/CUMULATIVE PRECIP. 838

PERIOD OF REPORT : APR 22,86 TO NOV 4,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	7	7	7	7	7	7	7
MAXIMUM	0.0190	15.00	0.30	22.77	124.30	25.00	0.40
MINIMUM	0.0000	1.00	0.20	2.06	4.81	1.81	0.40
RANGE	0.0190	14.00	0.10	20.71	119.49	23.19	0.00
ARITH. MEAN	0.0053	4.71	0.23	8.39	37.22	8.44	0.40
ARITH. STD. DEV	0.0065	4.99	0.05	7.04	40.59	7.84	0.00
GEOM. MEAN	0.0248	2.92	0.22	6.41	23.95	6.21	0.40
GEOM. STD. DEV.	4.4884	2.95	1.22	2.20	2.79	2.30	1.00
1ST QUARTILE	0.0000	1.00	0.20	2.89	9.27	2.97	0.40
2ND QUARTILE	0.0035	2.50	0.20	5.27	19.43	4.71	0.40
3RD QUARTILE	0.0055	5.50	0.25	9.81	39.41	9.38	0.40
VOL. WGT. MEAN	0.0048	3.51	0.22	7.08	27.98	6.90	0.40

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	7	7	7
MAXIMUM	114.90	1.56	0.17
MINIMUM	13.93	0.41	0.00
RANGE	100.97	1.15	0.17
ARITH. MEAN	39.07	1.14	0.05
ARITH. STD. DEV	36.53	0.44	0.06
GEOM. MEAN	29.28	1.04	0.06
GEOM. STD. DEV.	2.15	1.64	2.67
1ST QUARTILE	15.26	0.55	0.01
2ND QUARTILE	19.98	1.22	0.02
3RD QUARTILE	44.03	1.45	0.05
VOL. WGT. MEAN	32.18	1.03	0.03

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PALMERSTON/CUMULATIVE PRECIP. 808

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	12	11	10	10	10	11	11
MAXIMUM :	205.0	52.5	5.15	0.0891	0.1280	5.65	0.990
MINIMUM :	24.5	7.9	4.05	0.0071	0.0315	0.50	0.140
RANGE :	180.5	44.6	1.10	0.0820	0.0965	5.15	0.850
ARITH. MEAN :	69.4	31.4	4.41	0.0492	0.0790	3.22	0.567
ARITH. STD. DEV :	48.3	12.9	0.37	0.0267	0.0267	1.25	0.246
GEOM. MEAN :	58.7	28.4	4.40	0.0390	0.0745	2.86	0.507
GEOM. STD. DEV. :	1.8	1.7	1.08	2.3366	1.4586	1.86	1.722
1ST QUARTILE :	37.5	21.4	4.13	0.0237	0.0648	2.43	0.345
2ND QUARTILE :	61.3	29.3	4.30	0.0507	0.0753	3.35	0.525
3RD QUARTILE :	82.0	38.8	4.39	0.0614	0.0825	3.72	0.675
VOL. WGT. MEAN :	********	29.5	********	0.0490	0.0768	3.18	0.492

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIN MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	9	11	9	10	9	10	10
MAXIMUM :	0.520	1.600	0.910	0.305	0.075	0.210	0.820
MINIMUM :	0.100	0.050	0.460	0.020	0.010	0.015	0.065
RANGE :	0.420	1.550	0.450	0.285	0.065	0.195	0.755
ARITH. MEAN :	0.298	0.296	0.679	0.082	0.033	0.071	0.524
ARITH. STD. DEV :	0.155	0.441	0.175	0.083	0.021	0.066	0.213
GEOM. MEAN :	0.259	0.177	0.658	0.060	0.028	0.049	0.451
GEOM. STD. DEV. :	1.799	2.549	1.307	2.196	1.914	2.480	2.057
1ST QUARTILE :	0.160	0.075	0.500	0.030	0.017	0.020	0.405
2ND QUARTILE :	0.250	0.160	0.630	0.062	0.022	0.047	0.515
3RD QUARTILE :	0.375	0.240	0.805	0.082	0.040	0.077	0.632
VOL. WGT. MEAN :	0.260	0.182	0.617	0.058	0.028	0.048	0.502

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PALMERSTON/CUMULATIVE PRECIP. 808

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	10	10	9	10	10	10	10
MAXIMUM	0.0160	18.00	1.80	25.48	51.00	17.69	0.60
MINIMUM	0.0000	1.00	0.20	3.39	7.28	1.75	0.40
RANGE	0.0160	17.00	1.60	22.09	43.72	15.94	0.20
ARITH. MEAN	0.0059	4.40	0.63	10.04	25.83	4.61	0.42
ARITH. STD. DEV	0.0052	5.02	0.67	7.57	14.36	4.68	0.06
GEOM. MEAN	0.0329	2.93	0.40	8.08	21.95	3.61	0.42
GEOM. STD. DEV.	3.8812	2.50	2.63	1.96	1.88	1.88	1.14
1ST QUARTILE	0.0000	1.00	0.20	4.30	12.83	2.28	0.40
2ND QUARTILE	0.0070	4.00	0.20	8.02	23.17	3.36	0.40
3RD QUARTILE	0.0080	4.00	0.60	9.17	35.89	3.70	0.40
VOL. WGT. MEAN	0.0042	2.88	0.81	7.38	20.81	4.88	0.41

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	9	10	10
MAXIMUM	429.60	5.55	0.36
MINIMUM	7.12	0.23	0.02
RANGE	422.48	5.31	0.34
ARITH. MEAN	75.35	1.56	0.11
ARITH. STD. DEV	134.21	1.70	0.12
GEOM. MEAN	34.24	0.96	0.06
GEOM. STD. DEV.	3.25	2.84	2.91
1ST QUARTILE	14.65	0.32	0.02
2ND QUARTILE	26.52	0.97	0.06
3RD QUARTILE	46.66	1.50	0.11
VOL. WGT. MEAN	62.79	1.37	0.08

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	103.6	16.9	6.83	0.0324	0.0539	1.45	0.370
MINIMUM :	13.0	4.5	4.49	0.0001	0.0167	0.30	0.030
RANGE :	90.6	12.4	2.34	0.0322	0.0372	1.15	0.340
ARITH. MEAN :	50.2	8.8	5.24	0.0105	0.0300	0.87	0.195
ARITH. STD. DEV :	28.6	3.4	0.68	0.0088	0.0102	0.42	0.109
GEOM. MEAN :	42.6	8.3	5.21	0.0057	0.0286	0.78	0.161
GEOM. STD. DEV. :	1.9	1.4	1.13	4.7732	1.3887	1.67	2.034
1ST QUARTILE :	25.4	6.3	4.85	0.0046	0.0221	0.52	0.100
2ND QUARTILE :	44.0	7.5	5.01	0.0078	0.0290	0.67	0.160
3RD QUARTILE :	61.1	10.3	5.26	0.0133	0.0328	1.25	0.230
VOL. WGT. MEAN :	*******	8.2	*******	0.0090	0.0283	0.86	0.165

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	13	13	12	13	13	13	13
MAXIMUM :	0.550	0.300	0.400	0.080	0.120	0.265	0.330
MINIMUM :	0.030	0.030	0.130	0.010	0.005	0.000	0.005
RANGE :	0.520	0.270	0.270	0.070	0.115	0.265	0.325
ARITH. MEAN :	0.210	0.128	0.282	0.037	0.043	0.076	0.166
ARITH. STD. DEV :	0.161	0.094	0.104	0.024	0.034	0.081	0.100
GEOM. MEAN :	0.161	0.100	0.263	0.030	0.032	0.095	0.121
GEOM. STD. DEV. :	2.200	2.103	1.516	1.981	2.419	2.540	2.975
1ST QUARTILE :	0.100	0.060	0.185	0.015	0.015	0.017	0.080
2ND QUARTILE :	0.155	0.090	0.285	0.027	0.032	0.042	0.147
3RD QUARTILE :	0.240	0.150	0.380	0.045	0.055	0.082	0.233
VOL. WGT. MEAN :	0.195	0.102	0.292	0.032	0.042	0.074	0.186

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	12	13	13	13	13	13	13
MAXIMUM	0.0210	11.00	0.50	12.90	136.80	11.25	0.40
MINIMUM	0.0000	1.00	0.20	1.44	8.88	1.38	0.40
RANGE	0.0210	10.00	0.30	11.46	127.92	9.87	0.00
ARITH. MEAN	0.0109	3.31	0.25	4.66	43.90	4.92	0.40
ARITH. STD. DEV	0.0062	2.93	0.11	3.29	36.99	3.39	0.00
GEOM. MEAN	0.0158	2.44	0.23	3.76	32.23	3.88	0.40
GEOM. STD. DEV.	1.7889	2.21	1.41	1.98	2.29	2.09	1.00
1ST QUARTILE	0.0075	1.00	0.20	2.00	16.66	1.85	0.40
2ND QUARTILE	0.0090	2.00	0.20	3.52	28.89	3.82	0.40
3RD QUARTILE	0.0160	3.50	0.20	5.58	49.82	6.76	0.40
VOL. WGT. MEAN	0.0092	2.96	0.22	4.86	52.89	5.11	0.40

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13
MAXIMUM	108.10	15.56	0.16
MINIMUM	13.53	0.28	0.02
RANGE	94.57	15.28	0.14
ARITH. MEAN	45.90	2.83	0.05
ARITH. STD. DEV	26.12	4.97	0.04
GEOM. MEAN	39.58	1.01	0.03
GEOM. STD. DEV.	1.78	3.83	2.15
1ST QUARTILE	24.95	0.33	0.02
2ND QUARTILE	33.40	0.60	0.02
3RD QUARTILE	58.56	1.17	0.05
VOL. WGT. MEAN	51.91	3.54	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. 803

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	150.0	46.8	4.59	0.0891	0.1180	4.75	1.140
MINIMUM	17.0	25.3	4.05	0.0257	0.0495	1.90	0.390
RANGE	133.0	21.5	0.54	0.0634	0.0685	2.85	0.750
ARITH. MEAN	71.6	34.5	4.21	0.0637	0.0895	3.47	0.628
ARITH. STD. DEV	35.0	7.5	0.14	0.0168	0.0199	0.79	0.211
GEOM. MEAN	62.1	33.7	4.21	0.0611	0.0872	3.37	0.599
GEOM. STD. DEV.	1.8	1.2	1.03	1.3809	1.2717	1.29	1.361
1ST QUARTILE	42.7	26.6	4.12	0.0520	0.0752	3.07	0.470
2ND QUARTILE	75.8	34.6	4.16	0.0639	0.0879	3.63	0.535
3RD QUARTILE	85.0	38.1	4.24	0.0725	0.0968	3.75	0.725
VOL. WGT. MEAN	*******	34.5	*******	0.0656	0.0908	3.41	0.589

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	1.560	0.410	0.740	0.135	0.110	0.150	0.620
MINIMUM	0.180	0.080	0.230	0.020	0.005	0.015	0.175
RANGE	1.380	0.330	0.510	0.115	0.105	0.135	0.445
ARITH. MEAN	0.472	0.185	0.416	0.057	0.026	0.051	0.364
ARITH. STD. DEV	0.368	0.095	0.167	0.029	0.027	0.040	0.137
GEOM. MEAN	0.392	0.167	0.387	0.050	0.020	0.040	0.342
GEOM. STD. DEV.	1.794	1.559	1.492	1.686	2.106	2.015	1.478
1ST QUARTILE	0.255	0.130	0.250	0.032	0.012	0.022	0.243
2ND QUARTILE	0.350	0.140	0.405	0.057	0.017	0.032	0.332
3RD QUARTILE	0.440	0.190	0.460	0.065	0.025	0.055	0.450
VOL. WGT. MEAN	0.371	0.169	0.420	0.049	0.026	0.044	0.368

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. 803

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0400	6.00	4.00	10.41	161.90	39.51	1.80
MINIMUM	0.0000	1.00	0.20	5.12	13.21	2.17	0.40
RANGE	0.0400	5.00	3.80	5.29	148.69	37.34	1.40
ARITH. MEAN	0.0061	3.38	0.55	7.63	43.02	7.89	0.55
ARITH. STD. DEV	0.0106	1.76	1.05	1.59	38.87	9.69	0.40
GEOM. MEAN	0.0041	2.92	0.30	7.48	33.64	5.76	0.48
GEOM. STD. DEV.	5.7185	1.82	2.42	1.24	1.98	2.00	1.58
1ST QUARTILE	0.0000	2.00	0.20	6.36	21.26	3.82	0.40
2ND QUARTILE	0.0025	3.00	0.20	7.55	29.18	5.08	0.40
3RD QUARTILE	0.0050	4.00	0.20	8.69	46.30	6.13	0.40
VOL. WGT. MEAN	0.0058	3.08	0.53	7.73	40.46	7.69	0.55

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13
MAXIMUM	176.60	1.39	0.25
MINIMUM	7.95	0.28	0.02
RANGE	168.65	1.11	0.23
ARITH. MEAN	52.52	1.03	0.07
ARITH. STD. DEV	45.69	0.96	0.06
GEOM. MEAN	39.15	0.73	0.05
GEOM. STD. DEV.	2.22	2.35	2.33
1ST QUARTILE	23.13	0.33	0.02
2ND QUARTILE	33.25	0.53	0.04
3RD QUARTILE	56.38	1.29	0.08
VOL. WGT. MEAN	45.13	0.96	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. 832

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	166.0	16.0	6.69	0.0295	0.0431	2.50	0.400
MINIMUM	13.7	6.4	4.53	0.0002	0.0165	0.35	0.130
RANGE	152.3	9.6	2.16	0.0293	0.0266	1.95	0.270
ARITH. MEAN	55.0	10.3	5.05	0.0133	0.0313	1.02	0.251
ARITH. STD. DEV	48.2	3.0	0.58	0.0080	0.0081	0.61	0.086
GEOM. MEAN	41.6	9.9	5.02	0.0090	0.0303	0.88	0.237
GEOM. STD. DEV.	2.1	1.3	1.11	3.8328	1.3247	1.75	1.435
1ST QUARTILE	24.1	7.5	4.71	0.0072	0.0247	0.52	0.165
2ND QUARTILE	33.7	9.3	4.89	0.0113	0.0297	0.88	0.230
3RD QUARTILE	56.9	12.8	5.01	0.0176	0.0362	1.02	0.310
VOL. WGT. MEAN	*******	10.0	*******	0.0112	0.0296	1.16	0.239

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	11	11	10	11	11	11	11
MAXIMUM	0.470	0.260	0.640	0.115	0.045	0.170	0.575
MINIMUM	0.040	0.050	0.080	0.010	0.000	0.000	0.030
RANGE	0.430	0.210	0.560	0.105	0.045	0.170	0.545
ARITH. MEAN	0.182	0.095	0.296	0.031	0.018	0.056	0.216
ARITH. STD. DEV	0.135	0.060	0.214	0.031	0.019	0.053	0.173
GEOM. MEAN	0.142	0.084	0.231	0.023	0.052	0.055	0.156
GEOM. STD. DEV.	2.118	1.626	2.136	2.141	3.624	2.810	2.451
1ST QUARTILE	0.070	0.055	0.110	0.012	0.000	0.010	0.070
2ND QUARTILE	0.120	0.075	0.235	0.017	0.008	0.037	0.145
3RD QUARTILE	0.215	0.110	0.385	0.032	0.037	0.075	0.295
VOL. WGT. MEAN	0.172	0.076	0.344	0.030	0.026	0.037	0.278

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	10	10	10	10	10	10	10
MAXIMUM	0.0180	7.00	0.40	7.58	80.36	6.36	0.40
MINIMUM	0.0000	1.00	0.20	1.33	9.44	1.33	0.40
RANGE	0.0180	6.00	0.20	6.25	70.92	5.03	0.00
ARITH. MEAN	0.0092	3.00	0.22	3.81	36.14	3.32	0.40
ARITH. STD. DEV	0.0058	2.36	0.06	2.05	25.72	1.81	0.00
GEOM. MEAN	0.0139	2.29	0.21	3.35	28.38	2.91	0.40
GEOM. STD. DEV.	2.2597	2.14	1.25	1.71	2.12	1.72	1.00
1ST QUARTILE	0.0030	1.00	0.20	2.34	15.47	1.77	0.40
2ND QUARTILE	0.0095	2.00	0.20	3.04	25.78	2.76	0.40
3RD QUARTILE	0.0130	4.00	0.20	4.58	46.24	3.79	0.40
VOL. WGT. MEAN	0.0065	3.14	0.22	3.55	38.33	3.27	0.40

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	10	10	10
MAXIMUM	100.90	3.00	0.92
MINIMUM	8.95	0.27	0.02
RANGE	91.95	2.74	0.90
ARITH. MEAN	39.98	1.00	0.14
ARITH. STD. DEV	28.48	0.83	0.28
GEOM. MEAN	31.63	0.78	0.06
GEOM. STD. DEV.	2.10	2.03	3.17
1ST QUARTILE	16.56	0.51	0.02
2ND QUARTILE	28.76	0.62	0.05
3RD QUARTILE	52.30	1.10	0.06
VOL. WGT. MEAN	36.61	1.15	0.12

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 31,85 TO DEC 31,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	12	12	12	12	12	12	12
MAXIMUM :	266.0	41.5	4.60	0.0776	0.1050	4.15	1.090
MINIMUM :	16.4	16.0	4.11	0.0251	0.0489	1.30	0.240
RANGE :	249.6	25.5	0.49	0.0525	0.0561	2.85	0.850
ARITH. MEAN :	76.9	26.4	4.37	0.0452	0.0697	2.54	0.541
ARITH. STD. DEV :	64.4	7.7	0.16	0.0167	0.0185	0.90	0.212
GEOM. MEAN :	61.1	25.5	4.37	0.0425	0.0676	2.39	0.508
GEOM. STD. DEV. :	2.0	1.3	1.04	1.4465	1.2881	1.45	1.449
1ST QUARTILE :	41.1	21.7	4.24	0.0302	0.0546	1.80	0.425
2ND QUARTILE :	65.3	23.6	4.35	0.0452	0.0658	2.43	0.500
3RD QUARTILE :	86.8	30.7	4.52	0.0576	0.0785	3.25	0.620
VOL. WGT. MEAN :	*******	24.1	*******	0.0429	0.0655	2.28	0.454

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	12	12	12	12	12	12	12
MAXIMUM :	0.620	0.270	1.760	0.145	0.060	0.145	0.700
MINIMUM :	0.080	0.070	0.190	0.010	0.005	0.005	0.160
RANGE :	0.540	0.200	1.570	0.135	0.055	0.140	0.540
ARITH. MEAN :	0.297	0.147	0.617	0.054	0.023	0.051	0.385
ARITH. STD. DEV :	0.183	0.066	0.457	0.037	0.016	0.041	0.184
GEOM. MEAN :	0.242	0.135	0.502	0.043	0.018	0.035	0.343
GEOM. STD. DEV. :	2.009	1.553	1.910	2.095	2.027	2.671	1.677
1ST QUARTILE :	0.150	0.095	0.350	0.025	0.010	0.020	0.217
2ND QUARTILE :	0.245	0.125	0.435	0.052	0.020	0.042	0.405
3RD QUARTILE :	0.465	0.200	0.770	0.062	0.027	0.072	0.517
VOL. WGT. MEAN :	0.226	0.130	0.576	0.040	0.022	0.039	0.331

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 31,85 TO DEC 31,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	12	11	11	11	11	11	11
MAXIMUM	0.1400	5.00	1.30	7.47	46.51	8.56	0.50
MINIMUM	0.0000	1.00	0.20	2.51	7.81	1.26	0.40
RANGE	0.1400	4.00	1.10	4.96	38.70	7.30	0.10
ARITH. MEAN	0.0153	2.73	0.31	5.27	25.31	4.46	0.42
ARITH. STD. DEV	0.0394	1.49	0.33	1.53	12.35	2.24	0.04
GEOM. MEAN	0.0254	2.33	0.25	5.05	22.03	3.91	0.42
GEOM. STD. DEV.	4.4026	1.86	1.76	1.38	1.82	1.77	1.09
1ST QUARTILE	0.0015	1.00	0.20	4.19	12.10	2.42	0.40
2ND QUARTILE	0.0045	2.50	0.20	4.74	25.00	3.44	0.40
3RD QUARTILE	0.0065	3.50	0.20	6.58	31.88	6.20	0.40
VOL. WGT. MEAN	0.0153	2.32	0.26	5.51	20.55	3.86	0.41

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	11	11	11
MAXIMUM	57.23	4.66	0.22
MINIMUM	9.19	0.30	0.02
RANGE	48.04	4.36	0.20
ARITH. MEAN	33.85	1.04	0.06
ARITH. STD. DEV	18.28	1.26	0.06
GEOM. MEAN	28.75	0.71	0.04
GEOM. STD. DEV.	1.89	2.23	2.19
1ST QUARTILE	15.11	0.38	0.02
2ND QUARTILE	28.57	0.55	0.04
3RD QUARTILE	53.01	1.00	0.07
VOL. WGT. MEAN	27.23	0.82	0.06

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	139.0	47.9	4.75	0.1148	0.1330	4.75	1.020
MINIMUM	33.0	10.2	3.94	0.0178	0.0360	0.75	0.170
RANGE	106.0	37.7	0.81	0.0970	0.0970	4.00	0.850
ARITH. MEAN	77.6	30.4	4.30	0.0557	0.0784	3.01	0.569
ARITH. STD. DEV	38.3	9.4	0.22	0.0264	0.0268	1.08	0.246
GEOM. MEAN	68.9	28.7	4.30	0.0499	0.0740	2.76	0.515
GEOM. STD. DEV.	1.7	1.5	1.05	1.6548	1.4387	1.62	1.632
1ST QUARTILE	43.5	24.3	4.15	0.0359	0.0569	2.40	0.365
2ND QUARTILE	62.7	31.0	4.26	0.0501	0.0772	3.02	0.520
3RD QUARTILE	100.0	33.4	4.39	0.0639	0.0894	3.70	0.640
VOL. WGT. MEAN	*******	29.4	*******	0.0539	0.0761	3.11	0.492

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.860	0.330	1.080	0.245	0.065	0.225	0.950
MINIMUM	0.140	0.080	0.030	0.015	0.000	0.000	0.020
RANGE	0.720	0.250	1.050	0.230	0.065	0.225	0.930
ARITH. MEAN	0.352	0.157	0.398	0.062	0.023	0.068	0.316
ARITH. STD. DEV	0.240	0.065	0.248	0.063	0.023	0.069	0.226
GEOM. MEAN	0.298	0.138	0.316	0.044	0.053	0.059	0.240
GEOM. STD. DEV.	1.755	1.693	2.322	2.365	3.006	2.847	2.483
1ST QUARTILE	0.190	0.080	0.295	0.017	0.002	0.012	0.167
2ND QUARTILE	0.265	0.130	0.360	0.045	0.012	0.040	0.277
3RD QUARTILE	0.330	0.180	0.410	0.062	0.032	0.092	0.380
VOL. WGT. MEAN	0.328	0.130	0.387	0.056	0.021	0.048	0.317

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0180	10.00	0.60	9.95	47.70	15.00	0.60
MINIMUM	0.0010	1.00	0.20	3.30	10.09	1.15	0.40
RANGE	0.0170	9.00	0.40	6.65	37.61	13.85	0.20
ARITH. MEAN	0.0086	3.62	0.27	6.78	23.41	5.72	0.42
ARITH. STD. DEV	0.0062	3.07	0.13	2.13	12.40	4.57	0.06
GEOM. MEAN	0.0063	2.71	0.25	6.46	20.54	4.23	0.42
GEOM. STD. DEV.	2.4601	2.17	1.47	1.40	1.71	2.28	1.13
1ST QUARTILE	0.0035	1.50	0.20	4.98	12.49	2.39	0.40
2ND QUARTILE	0.0065	2.50	0.20	6.39	17.79	3.82	0.40
3RD QUARTILE	0.0105	3.50	0.25	8.15	29.05	7.02	0.40
VOL. WGT. MEAN	0.0072	3.13	0.24	6.14	20.64	4.52	0.42

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	12
MAXIMUM	55.00	4.77	0.14
MINIMUM	6.73	0.26	0.02
RANGE	48.27	4.52	0.12
ARITH. MEAN	27.22	1.07	0.05
ARITH. STD. DEV	17.12	1.35	0.05
GEOM. MEAN	22.28	0.64	0.04
GEOM. STD. DEV.	1.97	2.65	2.29
1ST QUARTILE	13.52	0.28	0.02
2ND QUARTILE	18.66	0.42	0.02
3RD QUARTILE	37.37	1.14	0.09
VOL. WGT. MEAN	21.59	0.78	0.04

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/CUMULATIVE PRECIP./7011

PERIOD OF REPORT : OCT 8,86 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	2	2	2	2	2	2	2
MAXIMUM	72.5	32.3	4.61	0.0617	0.0862	2.75	0.590
MINIMUM	65.0	13.3	4.21	0.0245	0.0463	1.00	0.260
RANGE	7.5	19.0	0.40	0.0371	0.0399	1.75	0.330
ARITH. MEAN	68.8	22.8	4.41	0.0431	0.0662	1.88	0.425
ARITH. STD. DEV	5.3	13.4	0.28	0.0262	0.0282	1.24	0.233
GEOM. MEAN	68.6	20.7	4.41	0.0389	0.0632	1.66	0.392
GEOM. STD. DEV.	1.1	1.9	1.07	1.9180	1.5519	2.04	1.785
1ST QUARTILE	*******	*******	*******	********	********	*******	********
2ND QUARTILE	*******	*******	*******	********	********	*******	********
3RD QUARTILE	*******	*******	*******	********	********	*******	********
VOL. WGT. MEAN	*******	23.3	*******	0.0441	0.0673	1.92	0.434

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	2	2	2	2	2	2	2
MAXIMUM	0.180	0.110	0.480	0.020	0.030	0.050	0.360
MINIMUM	0.040	0.070	0.160	0.005	0.000	0.030	0.065
RANGE	0.140	0.040	0.320	0.015	0.030	0.020	0.295
ARITH. MEAN	0.110	0.090	0.320	0.012	0.015	0.040	0.212
ARITH. STD. DEV	0.099	0.028	0.226	0.011	0.021	0.014	0.209
GEOM. MEAN	0.085	0.088	0.277	0.010	0.173	0.039	0.153
GEOM. STD. DEV.	2.897	1.377	2.175	2.665	5.774	1.435	3.355
1ST QUARTILE	********	********	********	********	********	********	********
2ND QUARTILE	********	********	********	********	********	********	********
3RD QUARTILE	********	********	********	********	********	********	********
VOL. WGT. MEAN	0.114	0.091	0.329	0.013	0.016	0.041	0.221

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/CUMULATIVE PRECIP./7011

PERIOD OF REPORT : OCT 8,86 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	2	2	2	2	2	2	2
MAXIMUM	0.0210	2.00	0.20	8.40	15.94	4.79	0.60
MINIMUM	0.0050	1.00	0.20	1.61	10.09	1.61	0.40
RANGE	0.0160	1.00	0.00	6.79	5.85	3.18	0.20
ARITH. MEAN	0.0130	1.50	0.20	5.00	13.01	3.20	0.50
ARITH. STD. DEV	0.0113	0.71	0.00	4.80	4.14	2.25	0.14
GEOM. MEAN	0.0102	1.41	0.20	3.68	12.68	2.78	0.49
GEOM. STD. DEV.	2.7587	1.63	1.00	3.22	1.38	2.16	1.33
1ST QUARTILE	********	*******	*******	*******	*******	*******	*******
2ND QUARTILE	********	*******	*******	*******	*******	*******	*******
3RD QUARTILE	********	*******	*******	*******	*******	*******	*******
VOL. WGT. MEAN	0.0134	1.53	0.20	5.19	13.17	3.29	0.51

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	2	2	2
MAXIMUM	15.75	0.58	1.06
MINIMUM	14.05	0.32	0.03
RANGE	1.70	0.26	1.03
ARITH. MEAN	14.90	0.45	0.54
ARITH. STD. DEV	1.20	0.18	0.73
GEOM. MEAN	14.88	0.43	0.18
GEOM. STD. DEV.	1.08	1.51	12.44
1ST QUARTILE	*******	*******	*******
2ND QUARTILE	*******	*******	*******
3RD QUARTILE	*******	*******	*******
VOL. WGT. MEAN	14.95	0.46	0.52

***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TURKEY LAKE/CUMULATIVE PRECIP. #37

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	205.0	37.8	6.53	0.0676	0.0928	4.40	0.730
MINIMUM	34.5	11.1	4.17	0.0003	0.0185	1.10	0.220
RANGE	170.5	26.7	2.36	0.0673	0.0743	3.30	0.510
ARITH. MEAN	97.6	21.9	4.61	0.0364	0.0586	2.32	0.395
ARITH. STD. DEV	54.9	7.4	0.61	0.0194	0.0219	1.00	0.138
GEOM. MEAN	84.1	20.8	4.57	0.0248	0.0541	2.13	0.374
GEOM. STD. DEV.	1.8	1.4	1.12	4.0762	1.5618	1.56	1.409
1ST QUARTILE	51.6	17.0	4.29	0.0240	0.0452	1.30	0.290
2ND QUARTILE	81.9	18.3	4.45	0.0335	0.0538	2.22	0.365
3RD QUARTILE	109.0	25.3	4.57	0.0468	0.0689	2.60	0.455
VOL. WGT. MEAN	*******	20.8	*******	0.0361	0.0568	2.20	0.345

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.870	0.140	0.930	0.135	0.080	0.140	0.740
MINIMUM	0.040	0.050	0.170	0.010	0.000	0.000	0.135
RANGE	0.830	0.090	0.760	0.125	0.080	0.140	0.605
ARITH. MEAN	0.242	0.086	0.405	0.039	0.032	0.041	0.337
ARITH. STD. DEV	0.253	0.030	0.212	0.037	0.024	0.035	0.166
GEOM. MEAN	0.164	0.082	0.365	0.028	0.036	0.046	0.305
GEOM. STD. DEV.	2.400	1.390	1.587	2.263	2.041	2.053	1.579
1ST QUARTILE	0.095	0.060	0.265	0.015	0.015	0.017	0.220
2ND QUARTILE	0.130	0.075	0.345	0.025	0.020	0.032	0.285
3RD QUARTILE	0.185	0.095	0.400	0.035	0.037	0.052	0.357
VOL. WGT. MEAN	0.183	0.077	0.361	0.029	0.023	0.031	0.307

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TURKEY LAKE/CUMULATIVE PRECIP. #37

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0160	9.00	0.70	18.27	153.30	5.50	0.70
MINIMUM	0.0000	1.00	0.20	1.23	9.35	1.19	0.40
RANGE	0.0160	8.00	0.50	17.04	143.95	4.31	0.30
ARITH. MEAN	0.0055	3.77	0.26	6.81	41.61	2.91	0.42
ARITH. STD. DEV	0.0052	2.80	0.14	5.41	41.88	1.36	0.08
GEOM. MEAN	0.0106	2.79	0.24	5.18	28.27	2.63	0.42
GEOM. STD. DEV.	3.2021	2.33	1.44	2.18	2.43	1.60	1.17
1ST QUARTILE	0.0010	1.00	0.20	2.93	12.34	2.16	0.40
2ND QUARTILE	0.0035	2.50	0.20	4.37	21.79	2.41	0.40
3RD QUARTILE	0.0070	5.50	0.25	6.80	42.61	3.40	0.40
VOL. WGT. MEAN	0.0040	3.19	0.24	5.58	29.66	2.74	0.44

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	13	13	13
MAXIMUM	202.40	4.71	0.10
MINIMUM	9.59	0.10	0.02
RANGE	192.81	4.61	0.08
ARITH. MEAN	49.36	0.91	0.04
ARITH. STD. DEV	59.31	1.21	0.03
GEOM. MEAN	29.43	0.55	0.03
GEOM. STD. DEV.	2.70	2.73	1.92
1ST QUARTILE	12.93	0.25	0.02
2ND QUARTILE	20.76	0.41	0.02
3RD QUARTILE	35.54	0.92	0.05
VOL. WGT. MEAN	33.03	0.61	0.03

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : UXBRIDGE/CUMULATIVE PRECIP. #11

PERIOD OF REPORT : JAN 28,86 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	9	8	8	8	8	8	8
MAXIMUM :	131.0	58.4	4.53	0.0977	0.1410	6.30	0.910
MINIMUM :	41.5	18.5	4.01	0.0295	0.0556	1.55	0.400
RANGE :	89.5	39.9	0.52	0.0682	0.0854	4.75	0.510
ARITH. MEAN :	75.6	30.6	4.32	0.0514	0.0814	3.16	0.609
ARITH. STD. DEV :	29.8	12.1	0.16	0.0216	0.0270	1.41	0.203
GEOM. MEAN :	70.8	29.0	4.31	0.0481	0.0782	2.93	0.581
GEOM. STD. DEV. :	1.5	1.4	1.04	1.4580	1.3403	1.49	1.384
1ST QUARTILE :	49.4	24.8	4.25	0.0369	0.0621	2.50	0.440
2ND QUARTILE :	69.9	27.8	4.31	0.0484	0.0768	2.82	0.540
3RD QUARTILE :	78.3	31.4	4.43	0.0568	0.0883	3.38	0.800
VOL. WGT. MEAN :	*******	33.7	*******	0.0561	0.0868	3.57	0.611

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	8	8	8	8	8	8	8
MAXIMUM :	0.830	0.530	0.690	0.105	0.175	0.395	0.590
MINIMUM :	0.220	0.080	0.300	0.030	0.000	0.010	0.260
RANGE :	0.610	0.450	0.390	0.075	0.175	0.385	0.330
ARITH. MEAN :	0.545	0.229	0.527	0.060	0.051	0.109	0.397
ARITH. STD. DEV :	0.238	0.153	0.129	0.026	0.056	0.127	0.138
GEOM. MEAN :	0.490	0.187	0.512	0.055	0.064	0.059	0.376
GEOM. STD. DEV. :	1.687	1.984	1.308	1.573	2.252	3.528	1.416
1ST QUARTILE :	0.360	0.100	0.460	0.037	0.022	0.020	0.265
2ND QUARTILE :	0.535	0.195	0.510	0.057	0.032	0.072	0.360
3RD QUARTILE :	0.760	0.315	0.645	0.077	0.060	0.140	0.537
VOL. WGT. MEAN :	0.557	0.193	0.532	0.065	0.062	0.078	0.422

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : UXBRIDGE/CUMULATIVE PRECIP. #11

PERIOD OF REPORT : JAN 28,86 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	8	8	8	8	8	8	8
MAXIMUM	0.0640	9.00	4.60	20.04	233.60	9.42	0.70
MINIMUM	0.0010	2.00	0.20	2.80	17.98	0.54	0.40
RANGE	0.0630	7.00	4.40	17.24	215.62	8.88	0.30
ARITH. MEAN	0.0137	4.50	0.94	9.27	62.77	5.03	0.44
ARITH. STD. DEV	0.0207	2.33	1.50	5.96	71.44	3.03	0.11
GEOM. MEAN	0.0069	3.99	0.48	7.68	43.43	3.77	0.43
GEOM. STD. DEV.	3.3855	1.70	2.93	1.96	2.31	2.63	1.22
1ST QUARTILE	0.0035	2.50	0.20	4.83	24.52	2.62	0.40
2ND QUARTILE	0.0065	4.50	0.40	8.02	35.99	5.48	0.40
3RD QUARTILE	0.0125	5.50	0.75	12.83	64.79	7.04	0.40
VOL. WGT. MEAN	0.0094	4.34	0.71	10.02	51.96	5.06	0.43

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	8	8	8
MAXIMUM	301.50	3.67	0.91
MINIMUM	13.46	0.26	0.03
RANGE	288.04	3.41	0.88
ARITH. MEAN	77.87	1.27	0.24
ARITH. STD. DEV	94.35	1.20	0.30
GEOM. MEAN	49.81	0.87	0.13
GEOM. STD. DEV.	2.57	2.53	3.07
1ST QUARTILE	31.26	0.45	0.07
2ND QUARTILE	35.88	0.76	0.10
3RD QUARTILE	86.87	1.89	0.32
VOL. WGT. MEAN	56.60	1.06	0.22

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WATERLOO/CUMULATIVE PRECIP. 807

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	12	11	11	11	12	12
MAXIMUM	135.0	46.0	5.15	0.0912	0.1170	4.80	0.960
MINIMUM	30.0	15.5	4.04	0.0071	0.0300	1.75	0.320
RANGE	105.0	32.5	1.11	0.0841	0.0870	3.05	0.640
ARITH. MEAN	77.9	35.1	4.30	0.0599	0.0854	3.62	0.596
ARITH. STD. DEV	31.1	10.7	0.33	0.0262	0.0298	0.92	0.187
GEOM. MEAN	71.7	33.2	4.29	0.0504	0.0791	3.49	0.568
GEOM. STD. DEV.	1.6	1.5	1.07	2.1198	1.5616	1.34	1.389
1ST QUARTILE	49.4	27.4	4.10	0.0302	0.0486	3.05	0.455
2ND QUARTILE	77.5	38.2	4.15	0.0708	0.0899	3.73	0.580
3RD QUARTILE	89.0	43.5	4.39	0.0767	0.1090	4.35	0.715
VOL. WGT. MEAN	*******	35.1	*******	0.0572	0.0822	3.73	0.556

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIN MG/L	POTASSIN MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	12	13	10	12	12	13	12
MAXIMUM	0.660	1.290	1.280	0.105	0.390	0.805	0.735
MINIMUM	0.180	0.080	0.160	0.035	0.010	0.010	0.005
RANGE	0.480	1.210	1.120	0.070	0.380	0.795	0.730
ARITH. MEAN	0.326	0.317	0.647	0.060	0.062	0.139	0.475
ARITH. STD. DEV	0.147	0.321	0.297	0.020	0.106	0.212	0.212
GEOM. MEAN	0.299	0.234	0.578	0.057	0.034	0.072	0.331
GEOM. STD. DEV.	1.525	2.115	1.724	1.369	2.643	3.091	3.985
1ST QUARTILE	0.210	0.140	0.490	0.045	0.020	0.032	0.435
2ND QUARTILE	0.270	0.170	0.570	0.057	0.027	0.052	0.515
3RD QUARTILE	0.420	0.365	0.760	0.070	0.045	0.120	0.597
VOL. WGT. MEAN	0.342	0.358	0.701	0.061	0.087	0.174	0.477

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WATERLOO/CUMULATIVE PRECIP. 807

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	10	12	12	12	12	12	12
MAXIMUM	0.0680	8.00	1.10	23.10	65.95	20.60	0.60
MINIMUM	0.0000	2.00	0.20	3.20	17.60	2.65	0.40
RANGE	0.0680	6.00	0.90	19.90	48.35	17.95	0.20
ARITH. MEAN	0.0109	3.50	0.36	9.10	35.03	6.42	0.42
ARITH. STD. DEV	0.0203	1.68	0.26	5.87	15.60	4.84	0.06
GEOM. MEAN	0.0097	3.21	0.30	7.82	32.10	5.45	0.42
GEOM. STD. DEV.	3.2812	1.53	1.73	1.74	1.54	1.75	1.14
1ST QUARTILE	0.0020	2.00	0.20	6.14	25.33	3.86	0.40
2ND QUARTILE	0.0050	3.50	0.25	7.08	33.01	4.95	0.40
3RD QUARTILE	0.0055	4.00	0.40	9.50	41.08	6.63	0.40
VOL. MGT. MEAN	0.0150	3.67	0.39	9.13	35.75	6.78	0.42

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	12	12	12
MAXIMUM	68.23	6.29	0.62
MINIMUM	13.06	0.33	0.02
RANGE	55.17	5.97	0.60
ARITH. MEAN	34.59	1.95	0.14
ARITH. STD. DEV	17.17	1.99	0.18
GEOM. MEAN	30.76	1.23	0.07
GEOM. STD. DEV.	1.67	2.75	3.16
1ST QUARTILE	19.39	0.53	0.02
2ND QUARTILE	33.54	1.15	0.09
3RD QUARTILE	46.68	3.14	0.12
VOL. MGT. MEAN	31.73	2.32	0.16

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITNEY/CUMULATIVE PRECIP. 819

PERIOD OF REPORT : JAN 2,86 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	12	12	12	13	13
MAXIMUM	123.0	46.5	5.02	0.1047	0.1280	4.35	1.000
MINIMUM	25.0	12.7	3.98	0.0095	0.0293	0.70	0.210
RANGE	98.0	33.8	1.04	0.0952	0.0987	3.65	0.790
ARITH. MEAN	68.9	27.1	4.37	0.0511	0.0722	2.37	0.487
ARITH. STD. DEV	30.9	11.8	0.30	0.0295	0.0303	1.06	0.232
GEOM. MEAN	62.1	24.6	4.36	0.0423	0.0661	2.12	0.438
GEOM. STD. DEV.	1.6	1.6	1.07	2.0106	1.5724	1.68	1.626
1ST QUARTILE	47.5	15.3	4.17	0.0279	0.0464	1.32	0.280
2ND QUARTILE	61.5	27.1	4.28	0.0522	0.0767	2.20	0.465
3RD QUARTILE	79.0	31.1	4.55	0.0676	0.0855	2.90	0.585
VOL. WGT. MEAN	*******	24.0	*******	0.0441	0.0646	2.23	0.417

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	12	13	12	13	12
MAXIMUM	0.640	0.300	0.900	0.125	0.105	0.120	0.545
MINIMUM	0.080	0.030	0.100	0.005	0.000	0.005	0.020
RANGE	0.560	0.270	0.800	0.120	0.105	0.115	0.525
ARITH. MEAN	0.212	0.126	0.386	0.037	0.029	0.048	0.281
ARITH. STD. DEV	0.145	0.074	0.215	0.034	0.034	0.032	0.153
GEOM. MEAN	0.180	0.106	0.330	0.027	0.044	0.036	0.216
GEOM. STD. DEV.	1.776	1.926	1.849	2.380	2.838	2.579	2.567
1ST QUARTILE	0.115	0.065	0.240	0.015	0.008	0.017	0.165
2ND QUARTILE	0.170	0.110	0.355	0.025	0.017	0.042	0.322
3RD QUARTILE	0.240	0.165	0.505	0.037	0.035	0.065	0.355
VOL. WGT. MEAN	0.199	0.108	0.360	0.036	0.026	0.043	0.272

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITNEY/CUMULATIVE PRECIP. #19

PERIOD OF REPORT : JAN 2,86 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	12	13	13	13	13	13	13
MAXIMUM	0.0780	8.00	2.00	16.57	133.80	13.20	0.60
MINIMUM	0.0000	1.00	0.20	1.35	8.25	1.62	0.40
RANGE	0.0780	7.00	1.80	15.22	125.55	11.58	0.20
ARITH. MEAN	0.0119	2.92	0.38	5.02	38.74	4.27	0.42
ARITH. STD. DEV	0.0215	2.40	0.51	4.10	36.34	3.58	0.06
GEOM. MEAN	0.0086	2.19	0.27	3.89	28.38	3.39	0.41
GEOM. STD. DEV.	3.7134	2.18	2.05	2.08	2.18	1.91	1.12
1ST QUARTILE	0.0020	1.00	0.20	2.03	17.17	2.35	0.40
2ND QUARTILE	0.0035	2.00	0.20	3.71	23.16	2.54	0.40
3RD QUARTILE	0.0125	3.50	0.20	5.56	31.56	4.01	0.40
VOL. WGT. MEAN	0.0101	2.99	0.29	4.73	34.44	4.62	0.41

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	12	13	12
MAXIMUM	64.04	2.86	0.20
MINIMUM	10.61	0.27	0.02
RANGE	53.43	2.60	0.18
ARITH. MEAN	30.42	1.00	0.06
ARITH. STD. DEV	16.41	0.77	0.06
GEOM. MEAN	26.41	0.77	0.04
GEOM. STD. DEV.	1.77	2.14	2.41
1ST QUARTILE	18.11	0.40	0.02
2ND QUARTILE	29.75	0.69	0.02
3RD QUARTILE	38.04	1.19	0.07
VOL. WGT. MEAN	26.97	0.89	0.06

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : JAN 3,86 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	12	12	12	13	13
MAXIMUM	160.0	49.9	4.96	0.1072	0.1320	5.05	0.860
MINIMUM	29.0	13.4	3.97	0.0110	0.0327	0.75	0.200
RANGE	131.0	36.5	0.99	0.0962	0.0993	4.30	0.660
ARITH. MEAN	76.3	28.5	4.35	0.0525	0.0781	2.74	0.521
ARITH. STD. DEV	38.8	10.7	0.27	0.0267	0.0306	1.16	0.210
GEOM. MEAN	68.3	26.6	4.34	0.0451	0.0721	2.48	0.477
GEOM. STD. DEV.	1.6	1.5	1.06	1.8812	1.5388	1.64	1.574
1ST QUARTILE	47.5	17.9	4.18	0.0285	0.0480	1.85	0.325
2ND QUARTILE	59.0	27.9	4.26	0.0553	0.0805	2.77	0.520
3RD QUARTILE	87.5	33.6	4.55	0.0668	0.0955	3.20	0.645
VOL. WGT. MEAN	*******	25.7	*******	0.0455	0.0690	2.62	0.446

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	12	13	12	13	12
MAXIMUM	0.560	0.370	1.040	0.080	0.200	0.160	0.760
MINIMUM	0.080	0.040	0.110	0.005	0.000	0.005	0.075
RANGE	0.480	0.330	0.930	0.075	0.200	0.155	0.685
ARITH. MEAN	0.221	0.144	0.394	0.033	0.036	0.050	0.337
ARITH. STD. DEV	0.125	0.093	0.243	0.022	0.053	0.045	0.180
GEOM. MEAN	0.192	0.121	0.337	0.026	0.032	0.033	0.291
GEOM. STD. DEV.	1.743	1.820	1.796	2.225	2.759	2.742	1.841
1ST QUARTILE	0.115	0.085	0.230	0.015	0.012	0.015	0.230
2ND QUARTILE	0.215	0.105	0.365	0.025	0.020	0.030	0.325
3RD QUARTILE	0.250	0.160	0.485	0.050	0.035	0.062	0.440
VOL. WGT. MEAN	0.198	0.122	0.427	0.032	0.046	0.040	0.345

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. 018

PERIOD OF REPORT : JAN 3,86 TO DEC 30,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	12	13	13	13	13	13	12
MAXIMUM	0.0680	5.00	1.00	9.89	65.54	6.05	3.70
MINIMUM	0.0000	1.00	0.20	1.51	8.10	1.17	0.40
RANGE	0.0680	4.00	0.80	8.37	57.44	4.88	3.30
ARITH. MEAN	0.0095	2.46	0.37	4.98	28.79	3.43	0.69
ARITH. STD. DEV	0.0189	1.20	0.33	2.35	15.70	1.71	0.95
GEOM. MEAN	0.0202	2.19	0.29	4.41	24.85	2.96	0.50
GEOM. STD. DEV.	5.1470	1.69	1.96	1.72	1.80	1.82	1.89
1ST QUARTILE	0.0005	1.50	0.20	2.76	16.01	1.50	0.40
2ND QUARTILE	0.0040	2.00	0.20	4.77	26.00	3.54	0.40
3RD QUARTILE	0.0085	3.00	0.20	6.34	34.30	4.35	0.45
VOL. WGT. MEAN	0.0130	2.30	0.30	4.68	25.88	2.97	0.68

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	12	13	13
MAXIMUM	84.61	3.11	1.33
MINIMUM	11.57	0.23	0.02
RANGE	73.04	2.87	1.31
ARITH. MEAN	37.53	1.08	0.16
ARITH. STD. DEV	24.21	0.78	0.35
GEOM. MEAN	30.91	0.87	0.06
GEOM. STD. DEV.	1.94	2.02	3.59
1ST QUARTILE	18.87	0.50	0.02
2ND QUARTILE	30.44	0.84	0.04
3RD QUARTILE	54.09	1.29	0.11
VOL. WGT. MEAN	31.34	0.93	0.11

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILKESPORT/CUMULATIVE PRECIP. #04

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	176.0	52.2	5.11	0.0933	0.1380	6.65	1.500
MINIMUM	8.2	20.2	4.03	0.0078	0.0279	2.20	0.360
RANGE	167.8	32.0	1.08	0.0856	0.1101	4.45	1.140
ARITH. MEAN	68.8	33.1	4.38	0.0513	0.0781	3.97	0.678
ARITH. STD. DEV	41.9	9.7	0.35	0.0256	0.0294	1.17	0.323
GEOM. MEAN	55.9	31.9	4.37	0.0418	0.0726	3.81	0.622
GEOM. STD. DEV.	2.1	1.3	1.08	2.2181	1.5170	1.35	1.510
1ST QUARTILE	47.4	26.1	4.18	0.0391	0.0641	3.27	0.455
2ND QUARTILE	55.3	30.6	4.27	0.0502	0.0740	3.92	0.530
3RD QUARTILE	81.6	35.3	4.37	0.0638	0.0826	4.30	0.750
VOL. WGT. MEAN	*******	32.0	*******	0.0544	0.0801	3.69	0.575

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	13	13	13	13	12	13	13
MAXIMUM	2.220	0.990	1.150	0.355	0.120	0.535	0.850
MINIMUM	0.160	0.100	0.230	0.035	0.010	0.015	0.215
RANGE	2.060	0.890	0.920	0.320	0.110	0.520	0.635
ARITH. MEAN	0.717	0.348	0.656	0.127	0.052	0.138	0.495
ARITH. STD. DEV	0.532	0.288	0.233	0.084	0.032	0.171	0.172
GEOM. MEAN	0.576	0.272	0.615	0.106	0.043	0.078	0.465
GEOM. STD. DEV.	2.007	2.007	1.487	1.872	1.979	2.885	1.459
1ST QUARTILE	0.305	0.170	0.480	0.060	0.027	0.040	0.370
2ND QUARTILE	0.615	0.200	0.650	0.118	0.045	0.047	0.483
3RD QUARTILE	0.780	0.355	0.695	0.137	0.072	0.110	0.575
VOL. WGT. MEAN	0.519	0.281	0.626	0.098	0.048	0.109	0.445

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILKESPORT/CUMULATIVE PRECIP. 804

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0250	10.00	11.00	38.38	125.50	9.76	2.70
MINIMUM	0.0000	1.00	0.20	4.42	15.71	2.34	0.40
RANGE	0.0250	9.00	10.80	33.96	109.79	7.42	2.30
ARITH. MEAN	0.0100	5.15	1.45	14.67	64.10	6.30	0.75
ARITH. STD. DEV	0.0083	2.61	3.05	9.39	39.62	2.87	0.67
GEOM. MEAN	0.0117	4.37	0.50	12.30	51.87	5.57	0.60
GEOM. STD. DEV.	2.4574	1.94	3.44	1.86	2.04	1.73	1.86
1ST QUARTILE	0.0035	3.00	0.20	7.28	24.42	3.25	0.40
2ND QUARTILE	0.0075	4.50	0.30	11.09	51.81	6.76	0.40
3RD QUARTILE	0.0125	7.00	0.45	18.13	94.40	8.23	0.65
VOL. WGT. MEAN	0.0099	4.15	1.26	13.74	50.57	5.24	0.64

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	13	13	13
MAXIMUM	158.40	4.55	0.63
MINIMUM	13.93	0.38	0.02
RANGE	144.47	4.17	0.61
ARITH. MEAN	69.58	1.48	0.16
ARITH. STD. DEV	45.71	1.24	0.20
GEOM. MEAN	55.86	1.10	0.08
GEOM. STD. DEV.	2.05	2.24	3.36
1ST QUARTILE	32.63	0.55	0.02
2ND QUARTILE	49.07	0.89	0.07
3RD QUARTILE	91.61	1.98	0.15
VOL. WGT. MEAN	54.79	1.23	0.14

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WINISK/CUMULATIVE PRECIP. #29

PERIOD OF REPORT : JAN 3,86 TO OCT 7,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	9	7	6	6	8	9	9
MAXIMUM :	252.9	39.9	6.30	0.0724	0.0986	5.35	0.910
MINIMUM :	12.1	8.9	4.14	0.0005	0.0166	0.70	0.050
RANGE :	240.8	31.0	2.16	0.0719	0.0820	4.65	0.860
ARITH. MEAN :	72.4	25.0	5.12	0.0220	0.0426	2.11	0.231
ARITH. STD. DEV :	73.3	13.1	0.87	0.0268	0.0268	1.51	0.282
GEOM. MEAN :	50.0	21.7	5.06	0.0076	0.0366	1.71	0.140
GEOM. STD. DEV. :	2.5	1.8	1.18	7.4209	1.7916	1.99	2.713
1ST QUARTILE :	24.1	10.6	4.36	0.0007	0.0253	0.85	0.060
2ND QUARTILE :	43.8	19.3	4.81	0.0161	0.0344	1.55	0.095
3RD QUARTILE :	80.3	37.6	5.51	0.0236	0.0531	2.38	0.195
VOL. WGT. MEAN :	*******	33.3	*******	0.0344	0.0431	2.06	0.167

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	8	9	7	9	8	9	8
MAXIMUM :	0.930	5.800	0.920	0.375	0.125	2.180	0.950
MINIMUM :	0.110	0.180	0.150	0.030	0.005	0.085	0.000
RANGE :	0.820	5.620	0.770	0.345	0.120	2.095	0.950
ARITH. MEAN :	0.634	1.689	0.470	0.174	0.055	0.767	0.341
ARITH. STD. DEV :	0.311	1.927	0.244	0.121	0.037	0.761	0.353
GEOM. MEAN :	0.533	0.872	0.415	0.136	0.041	0.443	0.445
GEOM. STD. DEV. :	2.076	3.581	1.758	2.228	2.628	3.238	2.215
1ST QUARTILE :	0.415	0.275	0.235	0.077	0.032	0.165	0.050
2ND QUARTILE :	0.675	0.585	0.405	0.140	0.052	0.270	0.232
3RD QUARTILE :	0.925	1.950	0.545	0.190	0.070	1.100	0.605
VOL. WGT. MEAN :	0.765	2.774	0.490	0.229	0.051	1.102	0.412

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WINISK/CUMULATIVE PRECIP. #29

PERIOD OF REPORT : JAN 3,86 TO OCT 7,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	8	8	8	8	8	8	8
MAXIMUM	0.5600	7.00	0.80	26.82	189.60	8.66	0.70
MINIMUM	0.0050	1.00	0.20	1.54	11.09	1.54	0.40
RANGE	0.5550	6.00	0.60	25.28	178.51	7.12	0.30
ARITH. MEAN	0.0895	4.00	0.39	8.35	53.18	4.05	0.44
ARITH. STD. DEV	0.1910	2.51	0.25	8.57	57.91	2.67	0.11
GEOM. MEAN	0.0256	3.23	0.33	5.34	36.78	3.38	0.43
GEOM. STD. DEV.	4.3424	2.10	1.83	2.80	2.37	1.89	1.22
1ST QUARTILE	0.0100	2.00	0.20	1.95	21.74	2.08	0.40
2ND QUARTILE	0.0190	3.50	0.25	5.84	30.75	3.00	0.40
3RD QUARTILE	0.0465	6.50	0.60	11.43	59.89	6.01	0.40
VOL. WGT. MEAN	0.2576	5.23	0.33	5.80	50.60	3.00	0.41

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	7	8	8
MAXIMUM	103.80	3.08	1.00
MINIMUM	33.90	0.31	0.02
RANGE	69.90	2.78	0.98
ARITH. MEAN	61.13	1.50	0.25
ARITH. STD. DEV	25.49	1.09	0.33
GEOM. MEAN	57.02	1.10	0.12
GEOM. STD. DEV.	1.49	2.48	3.85
1ST QUARTILE	39.12	0.48	0.03
2ND QUARTILE	48.83	1.32	0.13
3RD QUARTILE	74.08	2.52	0.31
VOL. WGT. MEAN	69.47	1.50	0.15

PART IV

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	60	58	57	57	57	59	59
MAXIMUM :	202.0	65.7	5.13	0.1259	0.1590	6.70	1.070
MINIMUM :	29.0	6.1	3.90	0.0074	0.0249	0.50	0.140
RANGE :	173.0	59.6	1.23	0.1185	0.1341	6.20	0.930
ARITH. MEAN :	76.6	28.5	4.35	0.0516	0.0766	2.75	0.531
ARITH. STD. DEV :	39.0	11.8	0.24	0.0265	0.0296	1.26	0.208
GEOM. MEAN :	68.8	26.2	4.34	0.0450	0.0713	2.47	0.488
GEOM. STD. DEV. :	1.6	1.5	1.06	1.7436	1.4693	1.65	1.540
1ST QUARTILE :	48.7	19.4	4.19	0.0327	0.0555	1.75	0.375
2ND QUARTILE :	62.6	26.9	4.31	0.0479	0.0732	2.70	0.515
3RD QUARTILE :	88.5	33.4	4.48	0.0638	0.0883	3.17	0.685
VOL. WGT. MEAN :	*******	27.2	*******	0.0483	0.0724	2.70	0.477

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	59	59	56	59	57	59	57
MAXIMUM :	0.830	0.530	1.040	0.105	0.200	0.395	0.760
MINIMUM :	0.000	0.040	0.040	0.005	0.000	0.000	0.075
RANGE :	0.830	0.490	1.000	0.100	0.200	0.395	0.685
ARITH. MEAN :	0.293	0.148	0.416	0.041	0.031	0.054	0.351
ARITH. STD. DEV :	0.183	0.096	0.199	0.023	0.035	0.063	0.168
GEOM. MEAN :	0.255	0.125	0.363	0.034	0.038	0.038	0.307
GEOM. STD. DEV. :	1.857	1.754	1.784	1.906	2.292	2.815	1.745
1ST QUARTILE :	0.160	0.080	0.260	0.020	0.010	0.015	0.243
2ND QUARTILE :	0.255	0.110	0.430	0.040	0.025	0.030	0.350
3RD QUARTILE :	0.365	0.180	0.510	0.055	0.035	0.082	0.447
VOL. WGT. MEAN :	0.272	0.129	0.419	0.040	0.035	0.044	0.345

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	56	58	58	58	57	58	57
MAXIMUM	0.0680	9.00	7.00	20.04	233.60	9.42	3.70
MINIMUM	0.0000	1.00	0.20	1.22	6.61	0.54	0.40
RANGE	0.0680	8.00	6.80	18.82	226.99	8.88	3.30
ARITH. MEAN	0.0086	3.07	0.61	5.80	35.90	3.80	0.49
ARITH. STD. DEV	0.0136	1.80	1.15	3.62	32.71	1.98	0.46
GEOM. MEAN	0.0118	2.58	0.33	4.90	28.25	3.24	0.44
GEOM. STD. DEV.	3.3463	1.84	2.41	1.81	1.96	1.83	1.42
1ST QUARTILE	0.0010	2.00	0.20	3.49	19.84	2.23	0.40
2ND QUARTILE	0.0060	3.00	0.20	5.60	28.75	3.61	0.40
3RD QUARTILE	0.0090	4.00	0.35	6.96	37.88	5.07	0.40
VOL. WGT. MEAN	0.0083	3.01	0.50	5.68	32.31	3.41	0.50

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	57	58	58
MAXIMUM	301.50	3.67	1.33
MINIMUM	6.66	0.23	0.02
RANGE	294.84	3.43	1.31
ARITH. MEAN	43.28	0.86	0.10
ARITH. STD. DEV	42.31	0.73	0.21
GEOM. MEAN	33.10	0.65	0.05
GEOM. STD. DEV.	2.04	2.06	2.80
1ST QUARTILE	23.59	0.33	0.02
2ND QUARTILE	32.17	0.62	0.04
3RD QUARTILE	45.25	1.06	0.10
VOL. WGT. MEAN	37.01	0.77	0.08

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 29,85 TO JAN 5,87

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	**	**	**	**	**	**	**
MAXIMUM	205.0	54.2	7.06	0.1230	0.4350	6.15	1.280
MINIMUM	3.5	5.3	3.91	0.0001	0.0114	0.35	0.000
RANGE	201.5	48.9	3.15	0.1229	0.4236	5.80	1.280
ARITH. MEAN	64.7	22.8	4.52	0.0398	0.0657	2.23	0.401
ARITH. STD. DEV	36.6	10.3	0.46	0.0231	0.0441	1.06	0.237
GEOM. MEAN	54.0	20.7	4.50	0.0303	0.0576	2.00	0.344
GEOM. STD. DEV.	1.9	1.6	1.09	2.8698	1.6534	1.63	1.830
1ST QUARTILE	38.5	15.6	4.31	0.0240	0.0442	1.38	0.220
2ND QUARTILE	61.1	20.3	4.44	0.0355	0.0592	2.02	0.340
3RD QUARTILE	83.7	27.4	4.62	0.0473	0.0782	2.80	0.530
VOL. WGT. MEAN	********	21.5	********	0.0380	0.0604	2.15	0.367

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	115	116	111	115	115	115	114
MAXIMUM	2.460	1.230	2.350	0.490	0.235	0.825	0.780
MINIMUM	0.000	0.030	0.070	0.005	0.000	0.000	0.000
RANGE	2.460	1.200	2.280	0.485	0.235	0.825	0.780
ARITH. MEAN	0.216	0.141	0.397	0.037	0.040	0.070	0.279
ARITH. STD. DEV	0.255	0.146	0.287	0.049	0.040	0.104	0.188
GEOM. MEAN	0.171	0.106	0.326	0.027	0.038	0.051	0.225
GEOM. STD. DEV.	2.022	2.004	1.878	2.173	2.367	2.660	2.432
1ST QUARTILE	0.110	0.060	0.220	0.015	0.015	0.020	0.125
2ND QUARTILE	0.160	0.105	0.320	0.025	0.030	0.040	0.248
3RD QUARTILE	0.240	0.160	0.500	0.040	0.047	0.070	0.390
VOL. WGT. MEAN	0.190	0.115	0.383	0.032	0.036	0.052	0.275

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 29,85 TO JAN 5,87

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	111	112	113	112	112	113	111
MAXIMUM	0.0780	19.00	4.00	133.30	902.00	20.53	1.50
MINIMUM	0.0000	1.00	0.20	1.22	5.96	1.16	0.40
RANGE	0.0780	18.00	3.80	132.08	896.03	19.37	1.10
ARITH. MEAN	0.0095	2.84	0.56	8.67	42.98	3.71	0.44
ARITH. STD. DEV	0.0124	2.46	0.76	13.29	87.90	2.82	0.15
GEOM. MEAN	0.0127	2.21	0.35	5.77	27.50	3.05	0.43
GEOM. STD. DEV.	3.0184	1.98	2.30	2.34	2.22	1.82	1.23
1ST QUARTILE	0.0020	1.00	0.20	3.39	14.38	1.80	0.40
2ND QUARTILE	0.0060	2.00	0.20	6.35	28.89	2.94	0.40
3RD QUARTILE	0.0120	4.00	0.60	9.79	43.21	4.69	0.40
VOL. WGT. MEAN	0.0076	2.83	0.49	6.39	41.55	3.49	0.44

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	111	111	110
MAXIMUM	622.60	25.92	0.87
MINIMUM	7.95	0.10	0.02
RANGE	614.65	25.82	0.85
ARITH. MEAN	45.25	1.92	0.10
ARITH. STD. DEV	65.15	3.32	0.16
GEOM. MEAN	30.31	1.01	0.05
GEOM. STD. DEV.	2.27	2.82	2.91
1ST QUARTILE	14.81	0.44	0.02
2ND QUARTILE	30.04	0.85	0.02
3RD QUARTILE	52.35	2.01	0.10
VOL. WGT. MEAN	40.62	1.45	0.07

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,65 TO JAN 1,67 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES	##	95	89	89	94	99	99
MAXIMUM	252.9	42.6	6.63	0.0724	0.0986	5.55	0.970
MINIMUM	4.3	4.4	4.14	0.0001	0.0160	0.30	0.000
RANGE	248.6	38.4	2.69	0.0723	0.0826	5.25	0.970
ARITH. MEAN	53.0	13.3	4.97	0.0176	0.0375	1.39	0.261
ARITH. STD. DEV	38.9	7.8	0.55	0.0149	0.0168	1.00	0.178
GEOM. MEAN	41.4	11.7	4.94	0.0107	0.0343	1.15	0.226
GEOM. STD. DEV.	2.1	1.6	1.11	3.5442	1.5099	1.83	1.900
1ST QUARTILE	26.1	7.9	4.63	0.0069	0.0260	0.75	0.150
2ND QUARTILE	43.9	11.3	4.82	0.0145	0.0343	1.13	0.230
3RD QUARTILE	68.9	15.9	5.13	0.0232	0.0431	1.50	0.340
VOL. WGT. MEAN	#######	13.6	#######	0.0160	0.0358	1.35	0.220

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	96	96	85	97	94	97	94
MAXIMUM	0.940	5.800	1.070	0.375	0.425	2.180	0.950
MINIMUM	0.030	0.020	0.050	0.005	0.000	0.000	0.000
RANGE	0.910	5.780	1.020	0.370	0.425	2.180	0.950
ARITH. MEAN	0.259	0.279	0.354	0.050	0.039	0.149	0.225
ARITH. STD. DEV	0.218	0.730	0.204	0.060	0.056	0.314	0.194
GEOM. MEAN	0.193	0.124	0.298	0.033	0.037	0.084	0.154
GEOM. STD. DEV.	2.161	2.739	1.847	2.298	2.687	3.304	3.324
1ST QUARTILE	0.110	0.065	0.195	0.015	0.010	0.025	0.090
2ND QUARTILE	0.190	0.100	0.322	0.030	0.022	0.062	0.183
3RD QUARTILE	0.310	0.190	0.430	0.055	0.045	0.127	0.317
VOL. WGT. MEAN	0.262	0.440	0.351	0.058	0.037	0.191	0.245

: INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,85 TO JAN 1,87

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	88	93	94	93	93	93	94
MAXIMUM	0.5600	15.00	3.00	53.35	211.50	25.00	0.70
MINIMUM	0.0000	1.00	0.20	1.33	4.81	1.18	0.40
RANGE	0.5600	14.00	2.80	52.02	206.69	23.82	0.30
ARITH. MEAN	0.0188	3.68	0.41	7.87	42.65	4.53	0.40
ARITH. STD. DEV	0.0601	3.40	0.52	8.48	39.49	3.55	0.03
GEOM. MEAN	0.0254	2.58	0.29	5.41	31.51	3.60	0.40
GEOM. STD. DEV.	2.8808	2.29	1.98	2.31	2.14	1.95	1.06
1ST QUARTILE	0.0050	1.00	0.20	2.99	20.47	1.99	0.40
2ND QUARTILE	0.0090	2.00	0.20	5.12	28.98	3.30	0.40
3RD QUARTILE	0.0165	5.00	0.35	8.95	51.67	6.13	0.40
VOL. WGT. MEAN	0.0389	3.50	0.32	6.33	38.58	3.93	0.40

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	92	90	94
MAXIMUM	236.80	20.11	1.57
MINIMUM	8.72	0.27	0.00
RANGE	228.08	19.84	1.57
ARITH. MEAN	50.92	2.00	0.13
ARITH. STD. DEV	44.26	3.18	0.26
GEOM. MEAN	38.37	1.11	0.06
GEOM. STD. DEV.	2.10	2.71	3.16
1ST QUARTILE	22.59	0.52	0.02
2ND QUARTILE	35.79	1.10	0.04
3RD QUARTILE	63.12	1.96	0.11
VOL. WGT. MEAN	43.38	1.73	0.10

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	52	50	49	49	50	50	50
MAXIMUM :	142.8	49.9	4.95	0.1148	0.1350	5.45	1.020
MINIMUM :	26.0	9.6	3.94	0.0112	0.0311	0.60	0.170
RANGE :	116.8	40.3	1.01	0.1036	0.1039	4.85	0.850
ARITH. MEAN :	70.0	26.6	4.38	0.0468	0.0710	2.67	0.485
ARITH. STD. DEV :	33.5	9.7	0.21	0.0223	0.0265	1.20	0.204
GEOM. MEAN :	62.9	24.8	4.37	0.0420	0.0666	2.37	0.445
GEOM. STD. DEV. :	1.6	1.5	1.05	1.6105	1.4365	1.68	1.528
1ST QUARTILE :	46.0	19.6	4.25	0.0306	0.0476	1.70	0.305
2ND QUARTILE :	66.5	25.3	4.35	0.0432	0.0672	2.70	0.475
3RD QUARTILE :	85.0	32.6	4.51	0.0531	0.0818	3.38	0.585
VOL. WGT. MEAN :	********	25.9	********	0.0454	0.0687	2.71	0.433

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	50	48	47	47	49	50	47
MAXIMUM :	0.860	0.550	1.080	0.355	0.190	0.380	0.950
MINIMUM :	0.060	0.050	0.030	0.005	0.000	0.000	0.020
RANGE :	0.800	0.500	1.050	0.350	0.190	0.380	0.930
ARITH. MEAN :	0.264	0.162	0.363	0.070	0.034	0.067	0.274
ARITH. STD. DEV :	0.180	0.106	0.183	0.086	0.036	0.070	0.158
GEOM. MEAN :	0.219	0.136	0.314	0.040	0.040	0.063	0.227
GEOM. STD. DEV. :	1.839	1.782	1.857	2.824	2.305	2.501	2.005
1ST QUARTILE :	0.140	0.080	0.260	0.015	0.010	0.017	0.160
2ND QUARTILE :	0.205	0.140	0.350	0.040	0.025	0.050	0.267
3RD QUARTILE :	0.300	0.180	0.410	0.070	0.040	0.095	0.360
VOL. WGT. MEAN :	0.246	0.137	0.363	0.072	0.033	0.052	0.281

****** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,85 TO DEC 30,86

	PHOSPHOR MG/L	MANGANSE UG/L	NICKEL UG/L	ZINC UG/L	IRON UG/L	LEAD UG/L	VANADIUM UG/L
# OF SAMPLES	47	50	50	50	50	50	50
MAXIMUM	0.0360	14.00	1.90	20.82	107.00	27.89	0.80
MINIMUM	0.0000	1.00	0.20	1.23	7.52	1.11	0.40
RANGE	0.0360	13.00	1.70	19.59	99.48	26.78	0.40
ARITH. MEAN	0.0076	3.38	0.32	6.42	24.51	4.78	0.43
ARITH. STD. DEV	0.0066	2.76	0.29	3.90	16.34	4.59	0.08
GEOM. MEAN	0.0071	2.61	0.27	5.50	20.89	3.58	0.42
GEOM. STD. DEV.	2.4089	2.04	1.65	1.76	1.74	2.08	1.17
1ST QUARTILE	0.0030	2.00	0.20	3.85	12.97	2.13	0.40
2ND QUARTILE	0.0065	2.00	0.20	5.59	22.53	3.44	0.40
3RD QUARTILE	0.0100	4.00	0.30	7.42	29.72	5.05	0.40
VOL. WGT. MEAN	0.0068	3.08	0.28	5.75	21.64	3.89	0.42

	ALUMINUM UG/L	COPPER UG/L	CADMIUM UG/L
# OF SAMPLES	50	50	49
MAXIMUM	79.16	12.91	0.35
MINIMUM	6.73	0.26	0.02
RANGE	72.43	12.65	0.33
ARITH. MEAN	27.21	1.44	0.06
ARITH. STD. DEV	15.01	1.96	0.07
GEOM. MEAN	23.40	0.90	0.04
GEOM. STD. DEV.	1.76	2.51	2.36
1ST QUARTILE	14.83	0.37	0.02
2ND QUARTILE	23.51	0.92	0.02
3RD QUARTILE	36.44	1.58	0.06
VOL. WGT. MEAN	23.00	1.22	0.05

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,85 TO DEC 31,86

	PRECIP. MM	CONDUCT. UMHO/CM	PH LAB	FREE H+ LAB MG/L	TOTAL H+ GRAN MG/L	SULPHATE MG/L	NITRATE AS N MG/L
# OF SAMPLES :	**	**	**	**	**	**	**
MAXIMUM :	283.2	55.2	5.15	0.0933	0.1380	6.65	1.500
MINIMUM :	8.2	7.9	4.03	0.0071	0.0279	0.50	0.140
RANGE :	275.0	47.3	1.12	0.0862	0.1101	6.15	1.360
ARITH. MEAN :	75.4	32.4	4.30	0.0561	0.0818	3.42	0.590
ARITH. STD. DEV :	47.7	9.1	0.24	0.0211	0.0230	1.02	0.229
GEOM. MEAN :	63.6	31.0	4.29	0.0502	0.0783	3.24	0.552
GEOM. STD. DEV. :	1.8	1.4	1.05	1.7380	1.3684	1.43	1.444
1ST QUARTILE :	45.0	25.9	4.14	0.0432	0.0688	2.90	0.440
2ND QUARTILE :	69.1	31.6	4.24	0.0575	0.0797	3.42	0.545
3RD QUARTILE :	90.0	38.2	4.35	0.0708	0.0962	4.00	0.700
VOL. WGT. MEAN :	*******	31.5	*******	0.0555	0.0804	3.35	0.524

	CALCIUM MG/L	CHLORIDE MG/L	KJELDAHL AS N MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	111	114	108	112	109	113	112
MAXIMUM :	2.220	1.600	1.760	0.355	0.390	0.805	0.900
MINIMUM :	0.080	0.050	0.110	0.010	0.005	0.005	0.005
RANGE :	2.140	1.550	1.650	0.345	0.385	0.800	0.895
ARITH. MEAN :	0.407	0.248	0.579	0.072	0.042	0.087	0.442
ARITH. STD. DEV :	0.298	0.232	0.284	0.052	0.044	0.122	0.190
GEOM. MEAN :	0.335	0.197	0.515	0.060	0.030	0.053	0.386
GEOM. STD. DEV. :	1.864	1.842	1.645	1.837	2.168	2.562	1.906
1ST QUARTILE :	0.230	0.130	0.395	0.045	0.020	0.030	0.295
2ND QUARTILE :	0.340	0.180	0.510	0.060	0.027	0.050	0.442
3RD QUARTILE :	0.500	0.255	0.710	0.080	0.050	0.087	0.577
VOL. WGT. MEAN :	0.336	0.218	0.574	0.061	0.044	0.079	0.431

***** : INSUFFICIENT DATA OR NOT APPLICABLE
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31,85 TO DEC 31,86

	PHOSPHOR	MANGANSE	NICKEL	ZINC	IRON	LEAD	VANADIUM
	MG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
# OF SAMPLES	109	110	109	110	110	110	110
MAXIMUM	0.1400	33.00	11.00	38.38	276.40	39.51	2.70
MINIMUM	0.0000	1.00	0.20	2.49	7.28	1.17	0.40
RANGE	0.1400	32.00	10.80	35.89	269.12	38.33	2.30
ARITH. MEAN	0.0107	4.12	0.71	10.29	44.09	6.26	0.50
ARITH. STD. DEV	0.0204	3.96	1.46	6.58	40.18	6.36	0.30
GEOM. MEAN	0.0185	3.17	0.35	8.73	33.95	4.79	0.46
GEOM. STD. DEV.	3.5201	2.02	2.56	1.75	2.00	1.95	1.40
1ST QUARTILE	0.0020	2.00	0.20	6.36	21.63	3.13	0.40
2ND QUARTILE	0.0050	3.00	0.20	8.34	34.19	4.80	0.40
3RD QUARTILE	0.0100	4.50	0.40	11.62	49.97	7.34	0.40
VOL. WGT. MEAN	0.0114	3.44	0.64	9.70	36.84	5.62	0.47

	ALUMINUM	COPPER	CADMIUM
	UG/L	UG/L	UG/L
# OF SAMPLES	108	109	110
MAXIMUM	429.60	10.15	0.67
MINIMUM	6.15	0.23	0.02
RANGE	423.45	9.92	0.65
ARITH. MEAN	48.36	1.46	0.10
ARITH. STD. DEV	49.33	1.53	0.13
GEOM. MEAN	36.34	0.95	0.06
GEOM. STD. DEV.	2.08	2.50	2.69
1ST QUARTILE	22.56	0.40	0.02
2ND QUARTILE	37.39	0.89	0.06
3RD QUARTILE	55.08	1.92	0.11
VOL. WGT. MEAN	39.80	1.33	0.09

PART V

SUMMARY STATISTICS OF WET DEPOSITION BY STATION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : ALVINSTON/CUMULATIVE PRECIP. 805

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	12	0	12	12	13	13
MAXIMUM	189.0	11.1292	********	548.10	73.710	40.850	28.350
MINIMUM	33.0	1.1403	********	70.38	14.076	5.496	4.290
RANGE	156.0	9.9889	********	477.72	59.634	35.354	24.060
ARITH. MEAN	72.4	4.2004	********	229.89	37.768	22.572	12.650
ARITH. STD. DEV	40.9	2.5945	********	135.76	17.542	10.560	6.873
GEOM. MEAN	64.8	3.6052	********	198.25	33.836	19.976	11.020
GEOM. STD. DEV.	1.6	1.7886	********	1.77	1.665	1.738	1.746
1ST QUARTILE	44.0	2.8452	********	142.78	25.705	14.865	6.630
2ND QUARTILE	59.6	3.8248	********	180.10	35.808	19.354	12.367
3RD QUARTILE	76.6	4.3693	********	294.33	49.607	27.828	14.203
VOL. WGT. MEAN	********	4.0791	********	223.25	36.677	22.572	12.650

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	79.380	10.450	10.450	8.621	64.260	1.5801	1.9800
MINIMUM	5.382	1.030	0.207	0.600	4.347	0.0000	0.0687
RANGE	73.998	9.420	10.243	8.021	59.913	1.5801	1.9113
ARITH. MEAN	29.731	4.355	3.327	4.084	24.349	0.3565	0.3735
ARITH. STD. DEV	20.038	2.688	2.641	2.604	17.192	0.4471	0.4997
GEOM. MEAN	24.126	3.651	2.397	3.123	18.880	0.3933	0.2420
GEOM. STD. DEV.	2.020	1.885	2.613	2.363	2.205	2.5517	2.3906
1ST QUARTILE	16.446	2.458	1.489	2.015	10.803	0.0295	0.1235
2ND QUARTILE	23.685	3.471	2.327	3.282	20.485	0.1716	0.2057
3RD QUARTILE	31.446	5.240	4.265	5.325	25.837	0.4633	0.3359
VOL. WGT. MEAN	29.731	4.355	3.327	4.084	24.349	0.3565	0.3735

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : ALVINSTON/CUMULATIVE PRECIP. #05

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.3354	1.331	8.3922	0.6723	0.076	6.850	0.7511
MINIMUM	0.0066	0.157	0.8052	0.0663	0.013	0.919	0.0134
RANGE	0.3288	1.173	7.5870	0.6060	0.062	5.931	0.7377
ARITH. MEAN	0.0676	0.495	2.9047	0.2798	0.033	2.768	0.1367
ARITH. STD. DEV	0.1063	0.303	1.9719	0.2003	0.018	1.559	0.1922
GEOM. MEAN	0.0284	0.423	2.4278	0.2224	0.029	2.434	0.0787
GEOM. STD. DEV.	3.5912	1.807	1.8557	2.0375	1.658	1.688	2.8857
1ST QUARTILE	0.0101	0.270	1.4321	0.1312	0.019	1.672	0.0334
2ND QUARTILE	0.0177	0.481	2.3891	0.1973	0.029	2.319	0.0824
3RD QUARTILE	0.0492	0.540	3.3188	0.3224	0.036	3.013	0.1204
VOL. WGT. MEAN	0.0676	0.495	2.9047	0.2798	0.033	2.768	0.1367

	CADMIUM
	MG/M**2
# OF SAMPLES	13
MAXIMUM	0.02776
MINIMUM	0.00066
RANGE	0.02710
ARITH. MEAN	0.00589
ARITH. STD. DEV	0.00766
GEOM. MEAN	0.00319
GEOM. STD. DEV.	3.07146
1ST QUARTILE	0.00143
2ND QUARTILE	0.00206
3RD QUARTILE	0.00557
VOL. WGT. MEAN	0.00589

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : AZURE LAKE/CUMULATIVE PRECIP. #26

PERIOD OF REPORT : JAN 2, 86 TO JAN 5,87

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	13	13	0	12	13	13	13
MAXIMUM :	148.0	5.6679	********	324.00	48.600	49.680	61.992
MINIMUM :	10.0	0.3162	********	15.50	1.100	0.500	1.650
RANGE :	138.0	5.3517	********	308.50	47.500	49.180	60.342
ARITH. MEAN :	62.5	2.1307	********	130.94	18.052	12.140	9.832
ARITH. STD. DEV :	38.5	1.5246	********	87.09	12.839	12.585	16.373
GEOM. MEAN :	50.6	1.6418	********	99.90	13.348	7.682	5.311
GEOM. STD. DEV. :	2.1	2.2280	********	2.38	2.576	3.058	2.642
1ST QUARTILE :	35.9	0.9549	********	68.45	9.258	4.677	2.745
2ND QUARTILE :	52.7	1.7373	********	117.95	12.086	8.416	3.558
3RD QUARTILE :	79.0	2.3479	********	196.00	23.530	13.240	6.880
VOL. WGT. MEAN :	********	2.1307	********	123.56	18.052	12.140	9.832

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES :	13	13	13	13	13	13	12
MAXIMUM :	66.120	5.400	6.160	41.580	43.200	2.4640	0.4320
MINIMUM :	1.400	0.100	0.000	0.000	0.000	0.0000	0.0177
RANGE :	64.720	5.300	6.160	41.580	43.200	2.4640	0.4143
ARITH. MEAN :	22.553	1.568	1.679	5.244	14.567	0.4528	0.1452
ARITH. STD. DEV :	19.549	1.459	2.077	11.422	13.052	0.6439	0.1214
GEOM. MEAN :	14.939	0.984	1.028	2.017	9.508	0.6208	0.1038
GEOM. STD. DEV. :	2.846	3.109	3.371	3.154	2.314	1.7658	2.4820
1ST QUARTILE :	8.741	0.542	0.182	0.705	4.394	0.0000	0.0630
2ND QUARTILE :	11.892	1.037	0.478	1.414	8.588	0.3251	0.1089
3RD QUARTILE :	31.212	1.757	1.992	1.930	18.468	0.4770	0.2045
VOL. WGT. MEAN :	22.553	1.568	1.679	5.244	14.567	0.4528	0.1357

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : AZURE LAKE/CUMULATIVE PRECIP. #26

PERIOD OF REPORT : JAN 2, 86 TO JAN 5,87

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	12	12	12	12	12	12	12
MAXIMUM	0.1663	1.206	3.7351	0.3803	0.064	4.361	0.3163
MINIMUM	0.0035	0.080	0.5655	0.0712	0.007	0.437	0.0175
RANGE	0.1628	1.126	3.1696	0.3091	0.057	3.924	0.2988
ARITH. MEAN	0.0362	0.438	1.5598	0.2034	0.030	1.671	0.0698
ARITH. STD. DEV	0.0534	0.365	0.8789	0.1126	0.018	1.198	0.0807
GEOM. MEAN	0.0179	0.323	1.3523	0.1722	0.025	1.322	0.0497
GEOM. STD. DEV.	3.1053	2.271	1.7633	1.8770	1.910	2.068	2.1678
1ST QUARTILE	0.0094	0.175	0.7938	0.0856	0.017	0.744	0.0295
2ND QUARTILE	0.0138	0.309	1.7125	0.1929	0.022	1.455	0.0464
3RD QUARTILE	0.0256	0.635	1.8273	0.3100	0.040	2.297	0.0733
VOL. WGT. MEAN	0.0338	0.409	1.4577	0.1900	0.028	1.562	0.0652

	CADMIUM MG/M**2
# OF SAMPLES	12
MAXIMUM	0.04284
MINIMUM	0.00035
RANGE	0.04249
ARITH. MEAN	0.00665
ARITH. STD. DEV	0.01180
GEOM. MEAN	0.00281
GEOM. STD. DEV.	3.62992
1ST QUARTILE	0.00126
2ND QUARTILE	0.00220
3RD QUARTILE	0.00680
VOL. WGT. MEAN	0.00621

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. 824

PERIOD OF REPORT : JAN 28, 86 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/MM**2	TOTAL H+ TO PH8.3 MG/MM**2	SULPHATE MG/MM**2	NITRATE AS N MG/MM**2	CALCIUM MG/MM**2	CHLORIDE MG/MM**2
# OF SAMPLES	12	12	0	12	12	12	12
MAXIMUM	107.0	7.7515	********	383.67	63.325	23.095	21.605
MINIMUM	18.7	0.8668	********	33.35	7.820	2.092	2.000
RANGE	88.3	6.8846	********	350.32	55.505	21.003	19.605
ARITH. MEAN	68.7	2.8905	********	162.29	24.402	10.559	7.953
ARITH. STD. DEV	32.2	2.2004	********	113.39	18.661	6.880	5.728
GEOM. MEAN	59.2	2.2767	********	125.66	19.556	8.250	6.288
GEOM. STD. DEV.	1.9	2.0473	********	2.21	1.946	2.216	2.066
1ST QUARTILE	38.6	1.1858	********	57.34	13.182	5.147	3.413
2ND QUARTILE	74.8	2.5361	********	158.76	16.391	9.375	6.317
3RD QUARTILE	94.8	3.1873	********	197.90	29.924	15.058	11.330
VOL. WGT. MEAN	********	2.8905	********	162.29	24.402	10.559	7.953

	KJELDAHL AS N MG/MM**2	MAGNESIUM MG/MM**2	POTASSIUM MG/MM**2	SODIUM MG/MM**2	AMMONIUM AS N MG/MM**2	PHOSPHOR MG/MM**2	MANGANESE MG/MM**2
# OF SAMPLES	12	12	12	12	12	12	12
MAXIMUM	74.500	4.470	14.700	9.313	58.110	1.6100	0.4280
MINIMUM	6.276	0.345	0.345	0.000	0.000	0.0500	0.0460
RANGE	68.224	4.125	14.355	9.313	58.110	1.5600	0.3820
ARITH. MEAN	25.373	1.818	4.813	3.478	19.469	0.7738	0.1707
ARITH. STD. DEV	20.201	1.282	4.522	3.025	16.138	0.5374	0.1193
GEOM. MEAN	19.106	1.364	3.012	2.592	13.259	0.5139	0.1335
GEOM. STD. DEV.	2.223	2.345	2.993	2.263	2.073	3.1644	2.1327
1ST QUARTILE	9.635	0.542	1.686	1.566	7.292	0.3094	0.0655
2ND QUARTILE	21.735	1.740	2.596	2.637	14.521	0.7597	0.1547
3RD QUARTILE	37.476	2.621	7.817	4.599	29.332	1.1490	0.2367
VOL. WGT. MEAN	25.373	1.818	4.813	3.478	19.469	0.7738	0.1707

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BEAR ISLAND/CUMULATIVE PRECIP. 824

PERIOD OF REPORT : JAN 28, 86 TO DEC 30,86

	NICKEL MG/MMM2	ZINC MG/MMM2	IRON MG/MMM2	LEAD MG/MMM2	VANADIUM MG/MMM2	ALUMINUM MG/MMM2	COPPER MG/MMM2
# OF SAMPLES	12	12	12	12	11	12	12
MAXIMUM	0.4280	1.067	3.8628	0.9572	0.043	5.259	0.7744
MINIMUM	0.0075	0.123	0.5125	0.0366	0.007	0.416	0.0096
RANGE	0.4205	0.944	3.3503	0.9206	0.035	4.843	0.7647
ARITH. MEAN	0.0836	0.533	1.9156	0.2281	0.030	2.037	0.2170
ARITH. STD. DEV	0.1121	0.287	1.1251	0.2479	0.012	1.530	0.2176
GEOM. MEAN	0.0515	0.461	1.6108	0.1605	0.026	1.614	0.1334
GEOM. STD. DEV.	2.6944	1.809	1.8886	2.2893	1.809	2.040	3.1733
1ST QUARTILE	0.0311	0.373	0.9732	0.1077	0.015	1.075	0.0757
2ND QUARTILE	0.0564	0.454	1.7746	0.1352	0.032	1.376	0.1380
3RD QUARTILE	0.0739	0.695	2.6073	0.2301	0.039	2.462	0.2530
VOL. WGT. MEAN	0.0836	0.533	1.9156	0.2281	0.028	2.037	0.2170

	CADMIUM MG/MMM2
# OF SAMPLES	12
MAXIMUM	0.01047
MINIMUM	0.00150
RANGE	0.00897
ARITH. MEAN	0.00493
ARITH. STD. DEV	0.00374
GEOM. MEAN	0.00373
GEOM. STD. DEV.	2.18862
1ST QUARTILE	0.00191
2ND QUARTILE	0.00302
3RD QUARTILE	0.00892
VOL. WGT. MEAN	0.00493

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	150.0	8.6316	********	405.00	51.000	28.200	21.350
MINIMUM	29.0	0.8559	********	43.50	11.890	7.300	4.930
RANGE	121.0	7.7758	********	361.50	39.110	20.900	16.420
ARITH. MEAN	44.7	3.9906	********	200.56	35.214	17.657	9.410
ARITH. STD. DEV	29.0	2.1736	********	110.28	11.835	7.162	4.950
GEOM. MEAN	60.2	3.4301	********	170.40	32.921	16.236	8.432
GEOM. STD. DEV.	1.5	1.8331	********	1.88	1.510	1.553	1.602
1ST QUARTILE	47.7	2.4089	********	119.35	27.533	11.942	5.637
2ND QUARTILE	58.0	3.2805	********	161.57	32.727	15.125	7.090
3RD QUARTILE	68.6	5.2042	********	234.07	42.987	20.480	11.230
VOL. WGT. MEAN	*********	3.9906	********	200.56	35.214	17.657	9.410

	KJELDAHL AS N MG/M**2	MAGNESIN MG/M**2	POTASSIN MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	49.500	5.037	2.712	10.065	40.880	0.9815	0.3875
MINIMUM	4.060	0.725	0.000	0.000	3.915	0.0000	0.0290
RANGE	45.440	4.312	2.712	10.065	36.965	0.9815	0.3585
ARITH. MEAN	26.344	2.391	1.238	3.036	21.654	0.2872	0.1765
ARITH. STD. DEV	14.689	1.262	0.921	2.886	11.897	0.2912	0.1006
GEOM. MEAN	21.976	2.070	1.195	2.131	18.111	0.2970	0.1477
GEOM. STD. DEV.	1.995	1.790	1.809	2.472	1.975	2.4076	1.9703
1ST QUARTILE	15.355	1.347	0.472	0.884	12.775	0.0596	0.1104
2ND QUARTILE	19.641	2.000	1.137	1.847	17.925	0.2322	0.1425
3RD QUARTILE	31.325	3.117	1.694	3.890	28.456	0.3060	0.2120
VOL. WGT. MEAN	26.344	2.391	1.238	3.036	21.654	0.2872	0.1765

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CAMPBELLFORD/CUMULATIVE PRECIP. #13

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.1868	0.892	2.8258	0.6175	0.060	3.615	0.1757
MINIMUM	0.0058	0.136	0.6502	0.1019	0.012	0.760	0.0118
RANGE	0.1802	0.756	2.1756	0.5156	0.048	2.855	0.1639
ARITH. MEAN	0.0329	0.337	1.5296	0.2674	0.026	1.892	0.0615
ARITH. STD. DEV	0.0493	0.205	0.6545	0.1321	0.011	0.905	0.0525
GEOM. MEAN	0.0192	0.290	1.4035	0.2400	0.025	1.691	0.0456
GEOM. STD. DEV.	2.5266	1.752	1.5505	1.6375	1.456	1.654	2.2088
1ST QUARTILE	0.0105	0.172	1.0015	0.1841	0.020	1.134	0.0254
2ND QUARTILE	0.0150	0.288	1.4651	0.2552	0.024	1.617	0.0440
3RD QUARTILE	0.0206	0.404	1.7292	0.2850	0.027	2.437	0.0478
VOL. WGT. MEAN	0.0329	0.337	1.5296	0.2674	0.026	1.892	0.0615

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.00780
MINIMUM	0.00058
RANGE	0.00722
ARITH. MEAN	0.00309
ARITH. STD. DEV	0.00243
GEOM. MEAN	0.00225
GEOM. STD. DEV.	2.34450
1ST QUARTILE	0.00114
2ND QUARTILE	0.00153
3RD QUARTILE	0.00445
VOL. WGT. MEAN	0.00309

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CLOYNE/CUMULATIVE PRECIP. #14

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/MM**2	TOTAL H+ TO PH8.3 MG/MM**2	SULPHATE MG/MM**2	NITRATE AS N MG/MM**2	CALCIUM MG/MM**2	CHLORIDE MG/MM**2
# OF SAMPLES	13	11	0	11	11	11	11
MAXIMUM	142.8	7.0969	********	426.40	53.550	35.100	14.700
MINIMUM	39.0	1.3597	********	60.90	14.500	6.750	6.250
RANGE	103.8	5.7392	********	367.50	39.050	28.350	8.450
ARITH. MEAN	80.0	3.8303	********	216.93	33.029	16.521	9.793
ARITH. STD. DEV	34.2	2.0706	********	133.64	11.271	9.032	2.801
GEOM. MEAN	73.8	3.3438	********	177.71	31.143	14.400	9.426
GEOM. STD. DEV.	1.5	1.7410	********	2.00	1.452	1.745	1.340
1ST QUARTILE	54.0	1.9952	********	80.15	22.899	7.230	6.650
2ND QUARTILE	68.9	2.9892	********	179.70	30.250	13.811	9.683
3RD QUARTILE	87.5	5.2430	********	321.12	41.185	20.650	11.630
VOL. WGT. MEAN	********	3.5444	********	200.74	30.564	15.288	9.062

	KJELDAHL AS N MG/MM**2	MAGNESIM MG/MM**2	POTASSIM MG/MM**2	SODIUM MG/MM**2	AMMONIUM AS N MG/MM**2	PHOSPHOR MG/MM**2	MANGANSE MG/MM**2
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	48.552	5.775	5.771	6.365	51.408	2.4444	0.9506
MINIMUM	10.440	0.580	0.675	0.000	4.930	0.0700	0.0580
RANGE	38.112	5.195	5.096	6.365	46.478	2.3744	0.8926
ARITH. MEAN	29.400	2.613	3.039	3.396	23.712	0.6815	0.2639
ARITH. STD. DEV	13.399	1.805	1.588	1.930	14.430	0.7313	0.2527
GEOM. MEAN	26.368	2.038	2.592	3.007	19.118	0.4333	0.1944
GEOM. STD. DEV.	1.466	2.180	1.906	1.647	2.114	2.7603	2.1900
1ST QUARTILE	15.225	0.847	1.417	1.637	8.750	0.1750	0.1075
2ND QUARTILE	25.900	2.008	2.600	3.325	21.700	0.3980	0.1414
3RD QUARTILE	41.725	3.675	3.885	4.837	34.137	0.5940	0.3325
VOL. WGT. MEAN	27.205	2.416	2.612	3.143	21.943	0.6307	0.2442

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART XII) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CLOYNE/CUMULATIVE PRECIP. 814

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	0.0315	1.037	2.4500	0.3797	0.057	2.983	0.3471
MINIMUM	0.0136	0.203	0.7581	0.1016	0.023	0.785	0.0104
RANGE	0.0179	0.834	1.6919	0.2781	0.034	2.197	0.3367
ARITH. MEAN	0.0202	0.449	1.7117	0.2285	0.037	1.778	0.1244
ARITH. STD. DEV	0.0065	0.225	0.5648	0.0939	0.011	0.603	0.0922
GEOM. MEAN	0.0193	0.409	1.6076	0.2108	0.036	1.682	0.0924
GEOM. STD. DEV.	1.3718	1.549	1.4844	1.5361	1.350	1.432	2.4208
1ST QUARTILE	0.0140	0.281	0.9872	0.1353	0.028	1.329	0.0309
2ND QUARTILE	0.0177	0.414	1.8003	0.1988	0.032	1.583	0.1127
3RD QUARTILE	0.0255	0.478	2.0917	0.3053	0.046	2.038	0.1531
VOL. WGT. MEAN	0.0187	0.416	1.5839	0.2114	0.034	1.645	0.1151

	CADMIUM MG/M**2
# OF SAMPLES	11
MAXIMUM	0.00945
MINIMUM	0.00136
RANGE	0.00809
ARITH. MEAN	0.00408
ARITH. STD. DEV	0.00246
GEOM. MEAN	0.00355
GEOM. STD. DEV.	1.72133
1ST QUARTILE	0.00255
2ND QUARTILE	0.00317
3RD QUARTILE	0.00420
VOL. WGT. MEAN	0.00378

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLCHESTER/CUMULATIVE PRECIP. 801

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	183.0	10.6581	********	649.65	64.050	53.070	36.200
MINIMUM	23.5	2.0002	********	82.25	13.794	4.672	5.852
RANGE	159.5	8.6579	********	567.40	50.256	48.398	30.348
ARITH. MEAN	77.5	4.5643	********	274.49	36.607	18.065	16.557
ARITH. STD. DEV	50.4	2.3882	********	181.09	15.213	12.867	10.164
GEOM. MEAN	65.7	4.1015	********	224.42	33.606	14.495	14.277
GEOM. STD. DEV.	1.8	1.5965	********	1.95	1.558	2.029	1.720
1ST QUARTILE	42.5	3.1393	********	139.85	27.170	7.730	10.314
2ND QUARTILE	60.7	3.5103	********	213.90	32.336	16.745	12.343
3RD QUARTILE	76.5	5.0046	********	313.42	44.550	19.866	14.560
VOL. WGT. MEAN	********	4.5643	********	274.49	36.607	18.065	16.557

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	12	13	13	13	13	12	13
MAXIMUM	197.640	9.150	19.215	12.960	161.040	17.7510	0.7320
MINIMUM	4.598	0.836	0.209	0.418	5.016	0.0000	0.0418
RANGE	193.042	8.314	19.006	12.542	156.024	17.7510	0.6902
ARITH. MEAN	48.359	3.547	3.976	5.184	38.863	2.3752	0.2060
ARITH. STD. DEV	54.251	2.379	5.603	4.176	42.316	5.2609	0.1899
GEOM. MEAN	31.336	2.840	2.075	3.605	26.545	0.5033	0.1506
GEOM. STD. DEV.	2.622	2.066	3.180	2.662	2.399	5.8198	2.2487
1ST QUARTILE	19.410	1.772	1.010	1.636	15.131	0.0823	0.0740
2ND QUARTILE	27.315	2.511	1.890	3.692	22.572	0.3181	0.1704
3RD QUARTILE	49.658	4.422	2.897	5.567	35.877	0.9450	0.1993
VOL. WGT. MEAN	48.076	3.547	3.976	5.184	38.863	2.3613	0.2060

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLCHESTER/CUMULATIVE PRECIP. 801

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	12
MAXIMUM	0.1944	2.112	13.4253	1.8743	0.073	5.329	0.2990
MINIMUM	0.0076	0.170	0.6920	0.1051	0.009	0.552	0.0228
RANGE	0.1868	1.942	12.7333	1.7692	0.064	4.777	0.2762
ARITH. MEAN	0.0345	0.893	3.1266	0.4351	0.033	2.630	0.0793
ARITH. STD. DEV	0.0494	0.584	3.3444	0.4746	0.021	1.580	0.0772
GEOM. MEAN	0.0218	0.724	2.1902	0.3012	0.027	2.162	0.0601
GEOM. STD. DEV.	2.3730	2.021	2.3201	2.3238	1.858	2.006	2.0387
1ST QUARTILE	0.0114	0.475	1.0433	0.1399	0.017	1.416	0.0412
2ND QUARTILE	0.0182	0.677	2.1145	0.2785	0.024	2.177	0.0569
3RD QUARTILE	0.0338	1.093	3.2999	0.4470	0.034	3.083	0.0695
VOL. WGT. MEAN	0.0345	0.893	3.1266	0.4351	0.033	2.630	0.0789

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.04344
MINIMUM	0.00076
RANGE	0.04268
ARITH. MEAN	0.00881
ARITH. STD. DEV	0.01178
GEOM. MEAN	0.00471
GEOM. STD. DEV.	3.23421
1ST QUARTILE	0.00198
2ND QUARTILE	0.00491
3RD QUARTILE	0.00764
VOL. WGT. MEAN	0.00881

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLDWATER/CUMULATIVE PRECIP. #12

PERIOD OF REPORT : JAN 28, 86 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH6.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12	11	0	12	12	12	12
MAXIMUM :	167.0	7.9834	********	472.70	59.800	38.430	16.700
MINIMUM :	35.0	0.2595	********	17.50	4.900	5.600	2.100
RANGE :	132.0	7.7239	********	455.20	54.900	32.830	14.600
ARITH. MEAN :	86.0	3.1267	********	210.76	36.321	21.987	9.769
ARITH. STD. DEV :	44.0	2.1757	********	134.59	16.710	12.819	5.175
GEOM. MEAN :	76.4	2.3417	********	159.07	31.083	17.710	8.153
GEOM. STD. DEV. :	1.7	2.5108	********	2.50	1.985	2.113	1.992
1ST QUARTILE :	51.5	1.3947	********	90.10	24.580	8.625	4.860
2ND QUARTILE :	82.8	2.3500	********	218.17	36.875	22.990	11.265
3RD QUARTILE :	103.5	4.1942	********	301.29	50.275	34.545	14.235
VOL. WGT. MEAN :	********	3.4191	********	210.76	36.321	21.987	9.769

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	10	12	11	12	11	10	11
MAXIMUM :	82.810	11.690	6.900	7.515	62.790	4.7320	1.3360
MINIMUM :	1.400	0.525	0.000	0.000	2.975	0.0000	0.0350
RANGE :	81.410	11.165	6.900	7.515	59.815	4.7320	1.3010
ARITH. MEAN :	36.216	3.903	3.128	3.539	29.986	0.8407	0.3409
ARITH. STD. DEV :	26.777	3.141	2.295	2.737	20.083	1.4006	0.3637
GEOM. MEAN :	23.609	2.806	2.478	2.550	21.834	0.5107	0.2147
GEOM. STD. DEV. :	3.382	2.487	2.193	2.525	2.642	3.0609	2.9190
1ST QUARTILE :	12.470	1.227	0.905	1.200	8.897	0.1520	0.0845
2ND QUARTILE :	28.590	3.497	2.835	3.595	25.637	0.3555	0.2265
3RD QUARTILE :	51.139	5.580	4.230	6.175	43.333	0.6794	0.3930
VOL. WGT. MEAN :	40.284	3.903	3.421	3.539	32.791	0.9351	0.3430

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLDWATER/CUMULATIVE PRECIP. #12

PERIOD OF REPORT : JAN 28, 86 TO DEC 30,86

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	11	11	10	11	11	11	11
MAXIMUM	0.4270	0.767	7.0115	0.3612	0.172	10.483	0.1894
MINIMUM	0.0070	0.067	0.4886	0.0667	0.014	0.632	0.0133
RANGE	0.4200	0.700	6.5229	0.2945	0.158	9.850	0.1760
ARITH. MEAN	0.0569	0.368	2.7489	0.2487	0.046	3.788	0.0525
ARITH. STD. DEV	0.1232	0.229	1.9613	0.0970	0.045	3.025	0.0533
GEOM. MEAN	0.0229	0.288	2.0812	0.2246	0.035	2.825	0.0374
GEOM. STD. DEV.	3.0601	2.265	2.3688	1.6952	2.073	2.301	2.2409
1ST QUARTILE	0.0100	0.136	0.9974	0.1525	0.019	1.383	0.0190
2ND QUARTILE	0.0166	0.347	2.4013	0.2628	0.029	2.544	0.0298
3RD QUARTILE	0.0330	0.464	3.3243	0.3338	0.051	5.024	0.0525
VOL. WGT. MEAN	0.0572	0.370	3.0576	0.2502	0.046	3.812	0.0528

	CADMIUM
	MG/M**2
# OF SAMPLES	11
MAXIMUM	0.01035
MINIMUM	0.00070
RANGE	0.00965
ARITH. MEAN	0.00422
ARITH. STD. DEV	0.00377
GEOM. MEAN	0.00276
GEOM. STD. DEV.	2.72151
1ST QUARTILE	0.00100
2ND QUARTILE	0.00191
3RD QUARTILE	0.00730
VOL. WGT. MEAN	0.00424

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	13	12	0	13	13	13	11
MAXIMUM :	141.0	7.8535	********	408.75	48.960	30.400	26.400
MINIMUM :	26.0	0.8752	********	52.50	14.400	4.620	3.120
RANGE :	115.0	6.9783	********	356.25	34.560	25.780	23.280
ARITH. MEAN :	65.3	2.7864	********	199.34	30.260	16.049	12.928
ARITH. STD. DEV :	30.5	1.9779	********	123.69	11.106	8.892	6.963
GEOM. MEAN :	59.1	2.2838	********	161.67	28.191	13.597	11.181
GEOM. STD. DEV. :	1.6	1.9085	********	2.03	1.499	1.881	1.815
1ST QUARTILE :	43.5	1.3822	********	84.16	18.675	8.775	7.260
2ND QUARTILE :	58.5	2.2255	********	164.50	32.895	13.929	11.560
3RD QUARTILE :	77.0	3.8092	********	262.22	37.147	19.935	15.480
VOL. WGT. MEAN :	********	2.7366	********	199.34	30.260	16.049	12.865

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	10	10	12	13	10	10	13
MAXIMUM :	62.040	34.545	14.440	18.240	47.235	0.7050	0.5100
MINIMUM :	7.200	0.330	0.000	0.000	5.100	0.0750	0.0600
RANGE :	54.840	34.215	14.440	18.240	42.135	0.6300	0.4500
ARITH. MEAN :	30.800	13.604	3.492	5.126	21.330	0.3419	0.2388
ARITH. STD. DEV :	19.727	12.063	4.105	4.622	13.645	0.2005	0.1474
GEOM. MEAN :	24.489	6.625	2.159	3.955	17.090	0.2846	0.1936
GEOM. STD. DEV. :	2.131	5.018	2.808	1.913	2.111	1.9786	2.0403
1ST QUARTILE :	11.505	1.980	0.780	2.425	8.775	0.1624	0.1040
2ND QUARTILE :	27.030	11.647	2.065	3.550	18.150	0.3065	0.2020
3RD QUARTILE :	45.900	21.111	4.592	5.355	31.100	0.4260	0.2969
VOL. WGT. MEAN :	28.906	12.767	3.430	5.126	20.018	0.3209	0.2388

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DALHOUSIE MILLS/CUMULATIVE PRECIP. #16

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0969	1.469	5.1360	0.7251	0.056	3.800	0.6197
MINIMUM	0.0078	0.173	0.3966	0.0947	0.010	0.689	0.0127
RANGE	0.0891	1.296	4.7394	0.6305	0.046	3.111	0.6070
ARITH. MEAN	0.0251	0.477	1.7136	0.3008	0.028	1.796	0.1141
ARITH. STD. DEV	0.0246	0.349	1.3431	0.1624	0.012	0.847	0.1607
GEOM. MEAN	0.0190	0.391	1.3342	0.2520	0.026	1.629	0.0679
GEOM. STD. DEV.	2.0314	1.897	2.0724	1.8916	1.624	1.589	2.6703
1ST QUARTILE	0.0126	0.191	0.7476	0.1216	0.017	1.195	0.0361
2ND QUARTILE	0.0154	0.391	1.1217	0.2878	0.029	1.588	0.0633
3RD QUARTILE	0.0224	0.541	1.9905	0.3480	0.033	2.038	0.0870
VOL. WGT. MEAN	0.0251	0.477	1.7136	0.3008	0.028	1.796	0.1141

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.01050
MINIMUM	0.00078
RANGE	0.00972
ARITH. MEAN	0.00461
ARITH. STD. DEV	0.00346
GEOM. MEAN	0.00339
GEOM. STD. DEV.	2.35540
1ST QUARTILE	0.00163
2ND QUARTILE	0.00273
3RD QUARTILE	0.00645
VOL. WGT. MEAN	0.00461

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORION/CUMULATIVE PRECIP. #31

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	103.7	4.4293	********	238.51	46.332	23.851	9.333
MINIMUM	10.4	0.3435	********	10.70	4.066	1.170	2.140
RANGE	93.3	4.0859	********	227.81	42.266	22.681	7.193
ARITH. MEAN	50.0	1.2400	********	82.76	15.807	9.659	4.644
ARITH. STD. DEV	29.8	1.1035	********	70.86	12.806	7.888	2.272
GEOM. MEAN	40.8	0.9520	********	58.45	12.335	6.729	4.188
GEOM. STD. DEV.	2.1	2.0528	********	2.48	2.029	2.602	1.598
1ST QUARTILE	27.4	0.5661	********	38.75	8.412	3.792	2.962
2ND QUARTILE	42.1	0.8144	********	53.98	10.029	7.456	3.878
3RD QUARTILE	61.5	1.3135	********	84.70	15.944	10.315	5.023
VOL. WGT. MEAN	********	1.2400	********	82.76	15.807	9.659	4.644

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	63.257	4.572	5.610	4.148	53.924	1.0370	0.4148
MINIMUM	2.457	0.107	0.000	0.635	0.214	0.0000	0.0117
RANGE	60.800	4.465	5.610	3.513	53.710	1.0370	0.4031
ARITH. MEAN	19.339	1.627	1.669	2.183	14.445	0.3537	0.1420
ARITH. STD. DEV	17.906	1.490	1.580	0.975	14.594	0.2881	0.1223
GEOM. MEAN	12.674	1.029	1.197	1.967	8.044	0.4064	0.0926
GEOM. STD. DEV.	2.760	3.041	2.648	1.650	4.061	1.8931	2.8970
1ST QUARTILE	5.076	0.651	0.367	1.460	4.431	0.1281	0.0421
2ND QUARTILE	13.340	1.080	1.132	1.782	9.732	0.3044	0.0951
3RD QUARTILE	19.790	1.539	2.188	2.798	13.114	0.5230	0.1785
VOL. WGT. MEAN	19.339	1.627	1.669	2.183	14.445	0.3537	0.1420

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORION/CUMULATIVE PRECIP. #31

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.1134	0.790	3.2406	0.7143	0.041	4.608	0.5519
MINIMUM	0.0023	0.079	0.2937	0.0326	0.004	0.432	0.0183
RANGE	0.1111	0.712	2.9470	0.6817	0.037	4.177	0.5336
ARITH. MEAN	0.0224	0.281	1.5584	0.1918	0.020	1.548	0.1061
ARITH. STD. DEV	0.0291	0.201	0.9070	0.1814	0.012	1.110	0.1556
GEOM. MEAN	0.0141	0.225	1.2610	0.1380	0.016	1.269	0.0525
GEOM. STD. DEV.	2.5871	2.008	2.1080	2.3067	2.062	1.908	3.0857
1ST QUARTILE	0.0076	0.107	0.7622	0.0709	0.011	0.783	0.0208
2ND QUARTILE	0.0123	0.223	1.6911	0.1252	0.017	1.168	0.0328
3RD QUARTILE	0.0209	0.329	1.9163	0.2190	0.025	1.690	0.0642
VOL. WGT. MEAN	0.0224	0.281	1.5584	0.1918	0.020	1.548	0.1061

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.07638
MINIMUM	0.00085
RANGE	0.07553
ARITH. MEAN	0.00963
ARITH. STD. DEV	0.02042
GEOM. MEAN	0.00349
GEOM. STD. DEV.	3.60300
1ST QUARTILE	0.00131
2ND QUARTILE	0.00206
3RD QUARTILE	0.00677
VOL. WGT. MEAN	0.00963

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/CUMULATIVE PRECIP. #20

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	202.0	6.3520	********	338.00	56.880	30.810	15.800
MINIMUM	40.0	1.0575	********	60.00	23.320	0.000	2.800
RANGE	162.0	5.2946	********	278.00	33.560	30.810	13.000
ARITH. MEAN	80.7	3.4389	********	178.52	34.735	15.566	8.192
ARITH. STD. DEV	50.0	1.4585	********	85.49	10.340	10.005	3.894
GEOM. MEAN	70.5	3.1327	********	158.35	33.460	11.708	7.393
GEOM. STD. DEV.	1.7	1.6035	********	1.70	1.322	1.866	1.611
1ST QUARTILE	49.5	2.4102	********	99.15	26.655	6.845	5.300
2ND QUARTILE	58.6	2.9939	********	166.50	31.383	13.595	6.776
3RD QUARTILE	82.5	4.1044	********	230.90	37.235	21.185	8.930
VOL. WGT. MEAN	********	3.4389	********	178.52	34.735	15.566	8.192

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	47.000	5.565	2.650	7.900	39.500	0.7566	0.3950
MINIMUM	10.400	0.400	0.000	0.325	7.600	0.0000	0.0400
RANGE	36.600	5.165	2.650	7.575	31.900	0.7566	0.3550
ARITH. MEAN	25.687	2.614	1.383	2.348	22.495	0.3707	0.1824
ARITH. STD. DEV	11.203	1.437	0.772	2.337	9.429	0.2604	0.0946
GEOM. MEAN	23.227	2.144	1.267	1.518	20.447	0.4222	0.1590
GEOM. STD. DEV.	1.626	2.092	1.882	2.651	1.614	2.0584	1.7914
1ST QUARTILE	13.650	1.235	0.820	0.742	14.195	0.1105	0.1190
2ND QUARTILE	24.910	2.717	1.465	1.005	21.187	0.3655	0.1635
3RD QUARTILE	33.778	3.140	1.962	3.020	27.959	0.5530	0.2010
VOL. WGT. MEAN	25.687	2.614	1.383	2.348	22.495	0.3707	0.1824

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/CUMULATIVE PRECIP. 820

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.1040	1.732	4.8569	0.4956	0.101	7.178	0.0722
MINIMUM	0.0080	0.095	0.3781	0.0845	0.016	0.950	0.0137
RANGE	0.0960	1.637	4.4788	0.4111	0.085	6.228	0.0585
ARITH. MEAN	0.0337	0.465	2.5515	0.2218	0.035	2.458	0.0360
ARITH. STD. DEV	0.0327	0.421	1.5943	0.1100	0.026	1.802	0.0199
GEOM. MEAN	0.0230	0.363	2.0114	0.1993	0.030	2.045	0.0311
GEOM. STD. DEV.	2.4107	1.989	2.2055	1.6223	1.755	1.814	1.7747
1ST QUARTILE	0.0106	0.258	1.2327	0.1347	0.021	1.237	0.0174
2ND QUARTILE	0.0173	0.321	2.0634	0.2038	0.023	2.118	0.0287
3RD QUARTILE	0.0370	0.398	3.6523	0.2380	0.033	2.323	0.0509
VOL. WGT. MEAN	0.0337	0.465	2.5515	0.2218	0.035	2.458	0.0360

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.01027
MINIMUM	0.00080
RANGE	0.00947
ARITH. MEAN	0.00324
ARITH. STD. DEV	0.00272
GEOM. MEAN	0.00242
GEOM. STD. DEV.	2.19813
1ST QUARTILE	0.00118
2ND QUARTILE	0.00206
3RD QUARTILE	0.00370
VOL. WGT. MEAN	0.00324

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EAR FALL'S/CUMULATIVE PRECIP. 835

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	12	0	12	12	12	12
MAXIMUM	100.0	0.9407	********	115.56	26.536	34.240	13.696
MINIMUM	4.3	0.0078	********	4.52	1.849	0.602	1.118
RANGE	95.7	0.9329	********	111.05	24.687	33.638	12.578
ARITH. MEAN	44.4	0.4181	********	42.34	9.316	8.700	4.531
ARITH. STD. DEV	31.7	0.3494	********	28.84	6.267	9.235	3.667
GEOM. MEAN	31.4	0.2148	********	33.24	7.625	5.630	3.420
GEOM. STD. DEV.	2.7	4.5452	********	2.25	2.008	2.807	2.205
1ST QUARTILE	14.3	0.0794	********	22.85	6.114	3.986	1.895
2ND QUARTILE	36.3	0.4243	********	37.66	8.900	6.826	3.443
3RD QUARTILE	60.3	0.7055	********	54.75	10.803	7.755	6.225
VOL. WGT. MEAN	********	0.3962	********	40.13	8.829	8.245	4.294

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	12	12	12	13	12	12	12
MAXIMUM	35.952	5.564	4.950	10.272	17.976	2.0544	1.1128
MINIMUM	1.505	0.086	0.107	0.000	0.860	0.0000	0.0086
RANGE	34.447	5.478	4.842	10.272	17.116	2.0544	1.1042
ARITH. MEAN	13.364	1.485	1.361	2.636	7.701	0.4898	0.2034
ARITH. STD. DEV	11.244	1.458	1.595	2.993	6.136	0.6304	0.3009
GEOM. MEAN	9.370	0.991	0.775	1.857	5.271	0.4362	0.1059
GEOM. STD. DEV.	2.544	2.811	3.080	2.466	2.716	2.4745	3.3203
1ST QUARTILE	4.703	0.655	0.433	0.634	3.054	0.1064	0.0615
2ND QUARTILE	10.342	1.100	0.702	1.544	6.230	0.2750	0.1061
3RD QUARTILE	17.152	1.725	1.491	2.719	12.002	0.5470	0.1980
VOL. WGT. MEAN	12.665	1.408	1.290	2.636	7.299	0.4642	0.1927

****** : INSUFFICIENT DATA.
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EAR FALL'S/CUMULATIVE PRECIP. #35

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	12	11	11	11	12	11	11
MAXIMUM	0.0440	1.025	5.1797	0.2493	0.040	6.807	0.0851
MINIMUM	0.0017	0.108	0.5645	0.0477	0.002	0.563	0.0095
RANGE	0.0423	0.917	4.6152	0.2016	0.038	6.244	0.0756
ARITH. MEAN	0.0165	0.352	1.9716	0.1214	0.019	2.252	0.0392
ARITH. STD. DEV	0.0119	0.321	1.7157	0.0523	0.013	1.880	0.0224
GEOM. MEAN	0.0124	0.260	1.4397	0.1121	0.013	1.711	0.0332
GEOM. STD. DEV.	2.4224	2.173	2.2437	1.5271	2.705	2.150	1.8894
1ST QUARTILE	0.0090	0.131	0.6945	0.0814	0.007	0.826	0.0193
2ND QUARTILE	0.0154	0.212	1.0996	0.1110	0.020	1.658	0.0303
3RD QUARTILE	0.0186	0.367	2.7854	0.1397	0.028	2.825	0.0501
VOL. WGT. MEAN	0.0157	0.308	1.7260	0.1063	0.018	1.972	0.0343

	CADMIUM MG/M**2
# OF SAMPLES	12
MAXIMUM	0.02881
MINIMUM	0.00017
RANGE	0.02864
ARITH. MEAN	0.00424
ARITH. STD. DEV	0.00788
GEOM. MEAN	0.00184
GEOM. STD. DEV.	3.55663
1ST QUARTILE	0.00121
2ND QUARTILE	0.00169
3RD QUARTILE	0.00337
VOL. WGT. MEAN	0.00402

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. #34

PERIOD OF REPORT : DEC 31, 85 TO JAN 1,87

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	11	10	0	11	11	10	11
MAXIMUM	100.0	0.9302	########	100.00	23.760	17.376	9.412
MINIMUM	7.8	0.1086	########	14.28	5.372	2.464	1.092
RANGE	92.2	0.8216	########	85.72	18.388	14.912	8.320
ARITH. MEAN	44.7	0.3439	########	46.86	10.545	9.766	3.914
ARITH. STD. DEV	34.0	0.2671	########	28.98	5.432	5.507	2.465
GEOM. MEAN	32.7	0.2652	########	38.65	9.582	8.050	3.202
GEOM. STD. DEV.	2.4	2.1401	########	1.96	1.546	2.036	1.882
1ST QUARTILE	13.8	0.1137	########	18.14	7.095	3.699	1.831
2ND QUARTILE	28.[illegible]	0.2854	########	33.72	8.141	10.261	3.335
3RD QUARTILE	64.2	0.4166	########	70.37	11.905	13.636	4.626
VOL. WGT. MEAN	########	0.3177	########	46.86	10.545	9.021	3.914

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	9	10	11	11	10	9	11
MAXIMUM	46.530	3.982	3.960	6.154	35.640	0.7240	0.4344
MINIMUM	3.136	0.297	0.000	0.000	2.016	0.0000	0.0224
RANGE	43.394	3.684	3.960	6.154	33.624	0.7240	0.4120
ARITH. MEAN	17.181	1.456	1.070	2.330	12.122	0.4178	0.1466
ARITH. STD. DEV	15.033	1.180	1.200	1.670	12.047	0.2806	0.1270
GEOM. MEAN	12.250	1.070	0.778	1.983	8.206	0.[illegible]913	0.0997
GEOM. STD. DEV.	2.448	2.353	2.556	1.96[illegible]	2.512	1.4212	2.6778
1ST QUARTILE	5.912	0.478	0.247	0.914	3.762	0.1400	0.0326
2ND QUARTILE	12.770	1.081	0.450	2.154	8.407	0.4273	0.1099
3RD QUARTILE	14.800	1.937	1.363	2.821	10.164	0.6042	0.1840
VOL. WGT. MEAN	14.766	1.345	1.070	2.330	11.198	0.3591	0.1466

: INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EXP. LAKES AREA/CUMULATIVE PRECIP. 834

PERIOD OF REPORT : DEC 31, 85 TO JAN 1,87

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	0.0672	0.466	5.2650	0.2322	0.040	10.498	0.3563
MINIMUM	0.0016	0.088	0.3628	0.0669	0.003	0.736	0.0166
RANGE	0.0656	0.378	4.9022	0.1653	0.037	9.762	0.3397
ARITH. MEAN	0.0163	0.224	1.6356	0.1275	0.018	2.365	0.0796
ARITH. STD. DEV	0.0189	0.121	1.5621	0.0542	0.014	2.758	0.0995
GEOM. MEAN	0.0097	0.197	1.1178	0.1179	0.013	1.736	0.0500
GEOM. STD. DEV.	2.9636	1.677	2.4895	1.5099	2.397	2.019	2.5295
1ST QUARTILE	0.0036	0.128	0.4241	0.0779	0.006	0.996	0.0224
2ND QUARTILE	0.0085	0.173	1.0350	0.1076	0.010	1.580	0.0334
3RD QUARTILE	0.0199	0.264	1.9009	0.1560	0.026	1.842	0.0903
VOL. WGT. MEAN	0.0163	0.224	1.6356	0.1275	0.018	2.365	0.0796

	CADMIUM MG/M**2
# OF SAMPLES	11
MAXIMUM	0.00796
MINIMUM	0.00016
RANGE	0.00781
ARITH. MEAN	0.00199
ARITH. STD. DEV	0.00239
GEOM. MEAN	0.00114
GEOM. STD. DEV.	3.09320
1ST QUARTILE	0.00046
2ND QUARTILE	0.00098
3RD QUARTILE	0.00199
VOL. WGT. MEAN	0.00199

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS Of CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERALDTON/CUMULATIVE PRECIP. 830

PERIOD OF REPORT : JAN 1, 86 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	13	9	0	13	13	17	11
MAXIMUM :	155.0	1.8173	********	147.25	27.900	25.636	27.900
MINIMUM :	22.1	0.1970	********	15.30	0.000	2.376	2.520
RANGE :	132.9	1.6203	********	131.95	27.900	23.260	25.380
ARITH. MEAN :	59.0	1.0912	********	72.80	11.166	10.499	8.541
ARITH. STD. DEV :	35.3	0.4912	********	50.08	8.526	8.128	7.307
GEOM. MEAN :	51.5	0.9432	********	55.23	7.780	7.867	6.819
GEOM. STD. DEV. :	1.7	1.9462	********	2.27	2.289	2.244	1.915
1ST QUARTILE :	33.3	0.7478	********	24.18	4.047	4.393	4.632
2ND QUARTILE :	50.1	1.0387	********	55.38	7.724	6.465	5.856
3RD QUARTILE :	62.8	1.3839	********	106.94	14.441	12.850	7.337
VOL. WGT. MEAN :	********	1.3220	********	72.80	11.166	10.499	8.112

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	9	13	10	11	11	10	12
MAXIMUM :	36.875	5.425	16.631	12.220	30.625	2.7560	0.6293
MINIMUM :	6.102	0.306	0.000	1.260	0.000	0.0000	0.0306
RANGE :	30.773	5.119	16.631	10.960	30.625	2.7560	0.5987
ARITH. MEAN :	15.758	1.990	2.259	4.947	7.046	0.6634	0.2036
ARITH. STD. DEV :	10.349	1.729	5.123	3.399	9.997	0.7825	0.2136
GEOM. MEAN :	13.192	1.405	0.973	4.074	1.717	0.7048	0.1169
GEOM. STD. DEV. :	1.870	2.410	3.819	1.917	8.133	1.8428	3.0430
1ST QUARTILE :	7.098	0.729	0.000	2.562	0.132	0.1188	0.0458
2ND QUARTILE :	12.320	1.123	0.265	3.463	1.167	0.5771	0.0935
3RD QUARTILE :	16.449	2.611	1.519	5.000	10.690	0.6705	0.4160
VOL. WGT. MEAN :	19.092	1.990	2.523	4.698	8.761	0.7999	0.1963

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERALDTON/CUMULATIVE PRECIP. 830

PERIOD OF REPORT : JAN 1, 86 TO DEC 30,86

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	12	12	12	12	12	12	10
MAXIMUM	0.0310	2.203	4.3675	0.7669	0.062	6.522	0.1737
MINIMUM	0.0061	0.103	0.4946	0.0881	0.009	0.761	0.0139
RANGE	0.0249	2.100	3.8729	0.6787	0.053	5.762	0.1598
ARITH. MEAN	0.0154	0.578	2.0362	0.2626	0.024	2.298	0.0674
ARITH. STD. DEV	0.0084	0.701	1.3906	0.2279	0.014	1.585	0.0498
GEOM. MEAN	0.0135	0.343	1.5535	0.1975	0.021	1.899	0.0532
GEOM. STD. DEV.	1.7100	2.742	2.2649	2.1187	1.696	1.898	2.0990
1ST QUARTILE	0.0091	0.163	0.6848	0.1040	0.015	1.155	0.0313
2ND QUARTILE	0.0137	0.294	1.7937	0.1612	0.021	2.223	0.0524
3RD QUARTILE	0.0184	0.574	3.3275	0.3504	0.030	2.941	0.0749
VOL. WGT. MEAN	0.0148	0.558	1.9631	0.2532	0.024	2.215	0.0670

	CADMIUM
	MG/M**2
# OF SAMPLES	12
MAXIMUM	0.00937
MINIMUM	0.00061
RANGE	0.00876
ARITH. MEAN	0.00353
ARITH. STD. DEV	0.00281
GEOM. MEAN	0.00256
GEOM. STD. DEV.	2.42354
1ST QUARTILE	0.00148
2ND QUARTILE	0.00277
3RD QUARTILE	0.00521
VOL. WGT. MEAN	0.00341

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. #17

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	137.0	5.0900	********	253.45	36.990	31.570	19.000
MINIMUM	26.0	1.0529	********	32.40	12.420	3.240	3.400
RANGE	111.0	4.0371	********	221.05	24.570	28.330	15.600
ARITH. MEAN	57.3	2.2410	********	116.26	21.951	11.861	6.715
ARITH. STD. DEV	29.0	1.1114	********	66.96	6.601	8.390	4.021
GEOM. MEAN	52.1	2.0404	********	98.41	21.098	9.583	6.014
GEOM. STD. DEV.	1.5	1.5457	********	1.87	1.338	1.976	1.569
1ST QUARTILE	39.0	1.5273	********	55.86	18.425	6.175	4.500
2ND QUARTILE	49.0	1.9404	********	105.63	20.080	8.850	5.500
3RD QUARTILE	61.0	2.3171	********	122.70	22.797	13.220	7.207
VOL. WGT. MEAN	********	2.2410	********	116.26	21.951	11.861	6.715

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	35.420	6.160	4.420	9.500	30.030	0.9590	0.3850
MINIMUM	2.700	0.500	0.000	0.000	2.500	0.0000	0.0350
RANGE	32.720	5.660	4.420	9.500	27.530	0.9590	0.3500
ARITH. MEAN	16.418	1.801	1.452	2.483	12.439	0.3907	0.1365
ARITH. STD. DEV	9.919	1.531	1.433	2.548	8.595	0.3286	0.0947
GEOM. MEAN	13.438	1.396	1.055	1.777	9.564	0.4188	0.1112
GEOM. STD. DEV.	2.048	2.053	2.530	2.387	2.250	2.1459	1.9559
1ST QUARTILE	9.340	0.740	0.305	0.662	5.250	0.0940	0.0670
2ND QUARTILE	14.450	1.405	1.037	1.840	10.270	0.3280	0.0945
3RD QUARTILE	19.050	1.642	1.400	2.635	15.730	0.5330	0.1760
VOL. WGT. MEAN	16.418	1.801	1.452	2.483	12.439	0.3907	0.1365

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOLDEN LAKE/CUMULATIVE PRECIP. 817

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0400	0.416	1.9219	0.6523	0.068	2.378	0.1399
MINIMUM	0.0070	0.087	0.4783	0.0437	0.010	0.621	0.0137
RANGE	0.0330	0.329	1.4436	0.6086	0.058	1.757	0.1262
ARITH. MEAN	0.0155	0.237	1.1482	0.2174	0.024	1.309	0.0535
ARITH. STD. DEV	0.0092	0.098	0.4282	0.1680	0.015	0.566	0.0404
GEOM. MEAN	0.0137	0.217	1.0693	0.1736	0.021	1.203	0.0424
GEOM. STD. DEV.	1.6351	1.565	1.5039	2.0063	1.617	1.534	2.0201
1ST QUARTILE	0.0092	0.178	0.8939	0.1374	0.016	0.864	0.0263
2ND QUARTILE	0.0122	0.212	1.0596	0.1694	0.020	1.082	0.0399
3RD QUARTILE	0.0157	0.268	1.2690	0.1982	0.024	1.531	0.0583
VOL. WGT. MEAN	0.0155	0.237	1.1482	0.2174	0.024	1.309	0.0535

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.00750
MINIMUM	0.00070
RANGE	0.00680
ARITH. MEAN	0.00201
ARITH. STD. DEV	0.00175
GEOM. MEAN	0.00164
GEOM. STD. DEV.	1.83429
1ST QUARTILE	0.00102
2ND QUARTILE	0.00157
3RD QUARTILE	0.00202
VOL. WGT. MEAN	0.00201

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/CUMULATIVE PRECIP. 825

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	13	12	0	13	13	13	13
MAXIMUM :	84.0	3.5017	********	180.60	21.330	11.340	7.110
MINIMUM :	12.0	0.7449	********	25.65	3.480	0.000	1.720
RANGE :	72.0	2.7568	********	154.95	17.850	11.340	5.390
ARITH. MEAN :	51.8	1.7956	********	95.42	11.909	6.258	4.121
ARITH. STD. DEV :	24.3	0.9847	********	56.72	5.335	3.941	1.754
GEOM. MEAN :	45.1	1.5696	********	79.51	10.591	4.791	3.751
GEOM. STD. DEV. :	1.8	1.7118	********	1.92	1.720	2.157	1.598
1ST QUARTILE :	27.5	1.0207	********	49.36	6.950	2.273	2.460
2ND QUARTILE :	49.0	1.3988	********	78.35	12.240	6.040	4.065
3RD QUARTILE :	71.0	2.8198	********	125.92	14.080	9.440	4.653
VOL. WGT. MEAN :	********	1.6875	********	95.42	11.909	6.258	4.121

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	183.300	2.365	5.460	5.460	22.875	0.8690	0.3660
MINIMUM :	1.800	0.180	0.000	0.340	0.060	0.0000	0.0240
RANGE :	181.500	2.185	5.460	5.120	22.815	0.8690	0.3420
ARITH. MEAN :	26.476	1.073	1.597	2.008	9.661	0.3144	0.1135
ARITH. STD. DEV :	47.753	0.712	1.434	1.772	6.166	0.2793	0.0953
GEOM. MEAN :	13.704	0.822	1.145	1.314	6.067	0.3299	0.0845
GEOM. STD. DEV. :	2.839	2.283	3.001	2.708	4.557	2.3682	2.2435
1ST QUARTILE :	7.830	0.395	0.586	0.585	5.445	0.0760	0.0434
2ND QUARTILE :	12.900	0.980	1.332	0.860	8.591	0.1950	0.0790
3RD QUARTILE :	16.935	1.380	2.057	3.195	12.000	0.4958	0.1440
VOL. WGT. MEAN :	26.476	1.073	1.597	2.008	9.661	0.3144	0.1135

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/CUMULATIVE PRECIP. #25

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0468	0.957	2.3242	1.1185	0.034	3.830	0.5526
MINIMUM	0.0054	0.107	0.1444	0.0391	0.005	0.770	0.0156
RANGE	0.0414	0.850	2.1798	1.0794	0.029	3.059	0.5371
ARITH. MEAN	0.0151	0.296	1.0981	0.2253	0.021	1.740	0.0916
ARITH. STD. DEV	0.0109	0.244	0.6637	0.2804	0.010	1.033	0.1421
GEOM. MEAN	0.0126	0.232	0.8599	0.1536	0.018	1.512	0.0535
GEOM. STD. DEV.	1.8240	1.987	2.2712	2.2630	1.849	1.708	2.5670
1ST QUARTILE	0.0079	0.121	0.4690	0.0938	0.011	0.891	0.0260
2ND QUARTILE	0.0129	0.196	1.0849	0.1234	0.020	1.316	0.0443
3RD QUARTILE	0.0160	0.290	1.4543	0.2026	0.030	2.081	0.0715
VOL. WGT. MEAN	0.0151	0.296	1.0981	0.2253	0.021	1.740	0.0916

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.00610
MINIMUM	0.00086
RANGE	0.00524
ARITH. MEAN	0.00253
ARITH. STD. DEV	0.00170
GEOM. MEAN	0.00210
GEOM. STD. DEV.	1.86428
1ST QUARTILE	0.00142
2ND QUARTILE	0.00182
3RD QUARTILE	0.00253
VOL. WGT. MEAN	0.00253

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HURON PARK/CUMULATIVE PRECIP. 806

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	13	13	0	13	13	13	13
MAXIMUM :	283.2	15.5630	********	892.08	103.600	62.304	59.472
MINIMUM :	17.0	0.3471	********	40.80	9.520	14.280	3.400
RANGE :	266.2	15.2159	********	851.28	94.080	48.024	56.072
ARITH. MEAN :	89.7	4.8019	********	303.10	44.706	30.788	16.033
ARITH. STD. DEV :	72.7	4.7808	********	257.31	28.780	15.624	14.367
GEOM. MEAN :	69.6	3.0064	********	219.82	37.008	27.504	12.508
GEOM. STD. DEV. :	2.1	2.9920	********	2.38	1.932	1.631	2.009
1ST QUARTILE :	43.8	2.1067	********	154.85	26.150	17.466	8.850
2ND QUARTILE :	65.1	3.1216	********	193.36	36.335	22.245	11.145
3RD QUARTILE :	88.6	3.7739	********	296.17	50.266	36.213	15.608
VOL. WGT. MEAN :	********	4.8019	********	303.10	44.706	30.788	16.033

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	13	13	13	13	13	13	13
MAXIMUM :	158.592	12.744	16.992	28.320	109.032	1.6992	0.7752
MINIMUM :	6.970	2.000	0.637	0.500	3.570	0.0000	0.0510
RANGE :	151.622	10.744	16.354	27.820	105.462	1.6992	0.7242
ARITH. MEAN :	53.219	5.165	3.542	5.383	42.266	0.4887	0.2944
ARITH. STD. DEV :	40.285	3.112	4.597	7.113	30.232	0.4612	0.1981
GEOM. MEAN :	40.982	4.459	2.242	3.325	31.813	0.5065	0.2382
GEOM. STD. DEV. :	2.214	1.734	2.416	2.749	2.418	2.0662	2.0376
1ST QUARTILE :	23.514	3.069	1.282	2.040	22.912	0.1625	0.1710
2ND QUARTILE :	42.415	3.283	1.658	3.848	31.534	0.3774	0.2455
3RD QUARTILE :	57.770	5.911	2.447	4.540	45.537	0.5214	0.3018
VOL. WGT. MEAN :	53.219	5.165	3.542	5.383	42.266	0.4887	0.2944

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HURON PARK/CUMULATIVE PRECIP. #06

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	12	13
MAXIMUM	0.3682	2.925	12.6038	1.1529	0.113	7.363	0.5848
MINIMUM	0.0034	0.178	0.5358	0.0425	0.007	0.599	0.0213
RANGE	0.3648	2.747	12.0680	1.1104	0.106	6.764	0.5635
ARITH. MEAN	0.0538	1.102	3.3847	0.4528	0.040	3.034	0.1112
ARITH. STD. DEV	0.1009	0.718	3.2406	0.3342	0.028	2.172	0.1547
GEOM. MEAN	0.0218	0.899	2.4561	0.3254	0.032	2.291	0.0643
GEOM. STD. DEV.	3.4440	2.027	2.2621	2.5701	2.072	2.298	2.6909
1ST QUARTILE	0.0092	0.612	1.4211	0.1572	0.019	1.266	0.0291
2ND QUARTILE	0.0166	0.895	2.3886	0.3530	0.034	2.352	0.0489
3RD QUARTILE	0.0261	1.247	3.2913	0.6524	0.043	4.596	0.0975
VOL. WGT. MEAN	0.0538	1.102	3.3846	0.4528	0.040	2.914	0.1112

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.03115
MINIMUM	0.00034
RANGE	0.03081
ARITH. MEAN	0.00620
ARITH. STD. DEV	0.00788
GEOM. MEAN	0.00371
GEOM. STD. DEV.	2.99781
1ST QUARTILE	0.00207
2ND QUARTILE	0.00419
3RD QUARTILE	0.00599
VOL. WGT. MEAN	0.00620

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : KILLARNEY/CUMULATIVE PRECIP. 823

PERIOD OF REPORT : DEC 30, 85 TO JAN 4,87

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	12	13
MAXIMUM	87.0	6.3721	********	264.60	84.000	22.530	16.797
MINIMUM	9.6	0.0079	********	18.24	0.000	1.632	1.920
RANGE	77.4	6.3642	********	246.36	84.000	20.898	14.877
ARITH. MEAN	53.2	2.8882	********	145.17	30.022	10.155	6.775
ARITH. STD. DEV	23.8	1.9732	********	75.98	24.969	5.642	4.633
GEOM. MEAN	46.6	1.5807	********	120.34	19.107	8.605	5.592
GEOM. STD. DEV.	1.8	5.9121	********	2.08	2.354	1.938	1.892
1ST QUARTILE	34.0	1.0684	********	75.51	11.872	6.720	3.674
2ND QUARTILE	50.9	3.0126	********	145.21	23.225	8.610	4.890
3RD QUARTILE	65.6	3.8628	********	191.75	29.050	13.145	6.820
VOL. WGT. MEAN	********	2.8882	********	145.17	30.022	10.200	6.775

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	12	12	12	12	13	12	13
MAXIMUM	65.520	3.280	3.054	8.144	56.280	0.6840	0.3755
MINIMUM	1.440	0.528	0.000	0.760	0.000	0.0000	0.0192
RANGE	64.080	2.752	3.054	7.384	56.280	0.6840	0.3563
ARITH. MEAN	26.118	1.624	1.250	2.388	19.404	0.2609	0.1271
ARITH. STD. DEV	18.766	0.833	0.840	2.058	15.998	0.2173	0.1110
GEOM. MEAN	18.747	1.445	1.099	1.877	11.105	0.3236	0.0928
GEOM. STD. DEV.	2.759	1.665	2.086	1.976	3.535	1.9036	2.2822
1ST QUARTILE	14.430	1.200	0.618	1.122	6.952	0.1130	0.0545
2ND QUARTILE	21.620	1.292	1.262	1.770	16.343	0.1968	0.0800
3RD QUARTILE	37.919	2.038	1.720	2.766	22.670	0.3913	0.1309
VOL. WGT. MEAN	26.232	1.631	1.255	2.399	19.404	0.2621	0.1271

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : KILLARNEY/CUMULATIVE PRECIP. #23

PERIOD OF REPORT : DEC 30, 85 TO JAN 4,87

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.1848	1.280	3.4005	0.5359	0.042	4.009	0.7588
MINIMUM	0.0058	0.119	0.3962	0.0284	0.004	0.396	0.0106
RANGE	0.1790	1.161	3.0043	0.5076	0.038	3.613	0.7482
ARITH. MEAN	0.0407	0.470	1.6599	0.2171	0.024	1.724	0.1092
ARITH. STD. DEV	0.0574	0.315	1.0270	0.1497	0.010	1.143	0.2008
GEOM. MEAN	0.0221	0.384	1.3593	0.1689	0.021	1.409	0.0481
GEOM. STD. DEV.	2.8296	1.956	1.9836	2.2121	1.828	1.960	3.3045
1ST QUARTILE	0.0101	0.204	0.8331	0.1001	0.020	0.892	0.0173
2ND QUARTILE	0.0171	0.426	1.1238	0.1606	0.022	1.170	0.0316
3RD QUARTILE	0.0269	0.547	2.3177	0.2805	0.028	2.073	0.0902
VOL. WGT. MEAN	0.0407	0.470	1.6599	0.2171	0.024	1.724	0.1092

	CADMIUM
	MG/M**2
# OF SAMPLES	13
MAXIMUM	0.01171
MINIMUM	0.00076
RANGE	0.01095
ARITH. MEAN	0.00430
ARITH. STD. DEV	0.00400
GEOM. MEAN	0.00283
GEOM. STD. DEV.	2.61432
1ST QUARTILE	0.00135
2ND QUARTILE	0.00188
3RD QUARTILE	0.00574
VOL. WGT. MEAN	0.00430

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/CUMULATIVE PRECIP. #33

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	10	8	0	10	10	9	9
MAXIMUM	150.0	1.0355	########	150.00	34.500	24.000	15.984
MINIMUM	14.8	0.2040	########	10.67	0.000	2.134	0.966
RANGE	135.2	0.8315	########	139.33	34.500	21.866	15.018
ARITH. MEAN	45.6	0.5385	########	55.74	9.181	8.476	6.791
ARITH. STD. DEV	38.9	0.2920	########	47.10	9.532	6.448	5.652
GEOM. MEAN	36.8	0.4709	########	40.98	6.475	6.744	4.581
GEOM. STD. DEV.	1.9	1.7579	########	2.30	1.961	2.072	2.712
1ST QUARTILE	23.3	0.3024	########	21.61	4.036	4.003	2.287
2ND QUARTILE	32.8	0.5021	########	40.54	6.698	7.264	2.757
3RD QUARTILE	43.5	0.7297	########	61.62	9.684	8.812	11.022
VOL. WGT. MEAN	########	0.4997	########	55.74	9.181	8.527	6.833

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	6	9	9	9	9	7	7
MAXIMUM	69.000	4.500	12.341	15.953	54.000	2.5840	0.4500
MINIMUM	5.760	0.291	0.160	0.194	0.148	0.0000	0.0194
RANGE	63.240	4.209	12.181	15.758	53.852	2.5840	0.4306
ARITH. MEAN	21.358	1.508	3.328	5.462	9.929	0.5352	0.1272
ARITH. STD. DEV	24.044	1.242	4.507	6.224	17.001	0.9420	0.1493
GEOM. MEAN	14.395	1.156	1.147	2.322	2.963	0.6948	0.0775
GEOM. STD. DEV.	2.478	2.204	5.041	4.841	6.396	2.4720	2.9009
1ST QUARTILE	6.261	0.726	0.312	0.881	0.603	0.0000	0.0257
2ND QUARTILE	12.434	1.229	0.533	1.747	3.292	0.0800	0.0677
3RD QUARTILE	17.882	1.383	3.757	7.660	7.993	0.5011	0.1268
VOL. WGT. MEAN	19.503	1.518	3.349	5.495	9.990	0.4748	0.1169

######## : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/CUMULATIVE PRECIP. #33

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	8	8	8	8	8	8	7
MAXIMUM	0.0739	0.917	3.9915	0.3434	0.060	3.938	0.2976
MINIMUM	0.0064	0.067	0.5698	0.0583	0.006	0.621	0.0117
RANGE	0.0675	0.849	3.4217	0.2851	0.054	3.316	0.2860
ARITH. MEAN	0.0252	0.445	1.6049	0.1998	0.020	1.692	0.1159
ARITH. STD. DEV	0.0217	0.354	1.2521	0.1264	0.017	1.130	0.1133
GEOM. MEAN	0.0189	0.300	1.2736	0.1588	0.015	1.410	0.0672
GEOM. STD. DEV.	2.2698	2.809	2.0145	2.1650	2.038	1.903	3.3954
1ST QUARTILE	0.0104	0.119	0.7481	0.0693	0.010	0.902	0.0168
2ND QUARTILE	0.0201	0.369	1.0394	0.1934	0.014	1.324	0.0495
3RD QUARTILE	0.0300	0.800	2.3515	0.3356	0.022	2.263	0.1906
VOL. WGT. MEAN	0.0232	0.410	1.4803	0.1843	0.018	1.561	0.1065

	CADMIUM MG/M**2
# OF SAMPLES	8
MAXIMUM	0.02324
MINIMUM	0.00064
RANGE	0.02259
ARITH. MEAN	0.00467
ARITH. STD. DEV	0.00755
GEOM. MEAN	0.00246
GEOM. STD. DEV.	2.86400
1ST QUARTILE	0.00132
2ND QUARTILE	0.00235
3RD QUARTILE	0.00306
VOL. WGT. MEAN	0.00430

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HATTAMA/CUMULATIVE PRECIP. 822

PERIOD OF REPORT : JAN 28, 86 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	12	10	0	12	12	12	12
MAXIMUM	113.0	6.2199	********	322.58	62.744	35.250	17.250
MINIMUM	14.0	0.7694	********	23.10	7.980	0.000	2.100
RANGE	99.0	5.4506	********	299.40	54.764	35.250	15.150
ARITH. MEAN	67.3	2.9419	********	160.46	28.080	13.804	7.473
ARITH. STD. DEV	28.6	1.6534	********	93.62	16.394	9.958	4.389
GEOM. MEAN	59.6	2.4800	********	127.07	24.189	9.919	6.435
GEOM. STD. DEV.	1.8	1.9314	********	2.25	1.778	2.094	1.779
1ST QUARTILE	53.1	1.3677	********	78.07	19.307	7.715	4.385
2ND QUARTILE	66.6	3.0368	********	165.37	21.796	12.460	6.150
3RD QUARTILE	87.6	3.6475	********	226.86	36.500	19.050	9.609
VOL. WGT. MEAN	********	2.9565	********	160.46	28.080	13.804	7.473

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	10	12	12	12	10	10	11
MAXIMUM	44.198	5.625	17.625	7.667	41.602	3.2000	1.9000
MINIMUM	3.080	0.280	0.306	0.000	1.260	0.0000	0.0280
RANGE	41.118	5.345	17.318	7.667	40.342	3.2000	1.8720
ARITH. MEAN	23.870	2.313	3.692	2.730	15.706	0.8593	0.3579
ARITH. STD. DEV	13.202	1.525	4.774	2.011	13.521	0.9923	0.5345
GEOM. MEAN	19.583	1.762	2.180	2.322	10.186	0.5575	0.1875
GEOM. STD. DEV.	2.153	2.377	2.874	1.820	2.982	3.3867	3.1267
1ST QUARTILE	14.975	0.987	1.312	1.372	4.454	0.0870	0.0731
2ND QUARTILE	20.625	2.494	2.127	2.443	13.012	0.6287	0.1650
3RD QUARTILE	30.080	3.125	3.400	3.837	20.710	1.0771	0.3385
VOL. WGT. MEAN	23.988	2.313	3.692	2.730	15.784	0.8636	0.3400

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HATTAHA/CUMULATIVE PRECIP. #22

PERIOD OF REPORT : JAN 28, 86 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	0.0800	0.738	90.2000	0.4376	0.120	62.260	0.1575
MINIMUM	0.0090	0.165	0.5509	0.0411	0.006	0.751	0.0294
RANGE	0.0710	0.572	89.6491	0.3965	0.114	61.509	0.1281
ARITH. MEAN	0.0339	0.452	11.0536	0.2425	0.042	8.011	0.0674
ARITH. STD. DEV	0.0240	0.210	26.3322	0.1364	0.035	18.071	0.0447
GEOM. MEAN	0.0268	0.402	3.2006	0.1990	0.032	2.778	0.0580
GEOM. STD. DEV.	2.0746	1.705	4.1074	2.0734	2.260	3.514	1.7139
1ST QUARTILE	0.0124	0.229	0.7628	0.1186	0.021	0.847	0.0387
2ND QUARTILE	0.0253	0.415	3.0861	0.1970	0.029	2.268	0.0518
3RD QUARTILE	0.0466	0.636	5.7535	0.3464	0.041	4.268	0.0623
VOL. WGT. MEAN	0.0322	0.430	10.5015	0.2303	0.040	7.611	0.0641

	CADMIUM MG/M**2
# OF SAMPLES	11
MAXIMUM	0.01218
MINIMUM	0.00090
RANGE	0.01128
ARITH. MEAN	0.00352
ARITH. STD. DEV	0.00355
GEOM. MEAN	0.00247
GEOM. STD. DEV.	2.29544
1ST QUARTILE	0.00124
2ND QUARTILE	0.00185
3RD QUARTILE	0.00387
VOL. WGT. MEAN	0.00335

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MCKELLAR/CUMULATIVE PRECIP. 821

PERIOD OF REPORT : DEC 31, 85 TO DEC 29,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH6.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	12	0	13	13	13	12
MAXIMUM	141.0	4.8890	********	250.95	68.250	24.622	26.650
MINIMUM	22.6	1.0550	********	61.02	14.454	4.680	2.760
RANGE	118.4	3.8340	********	189.93	53.796	19.942	23.890
ARITH. MEAN	70.0	2.7574	********	148.22	32.341	12.779	11.184
ARITH. STD. DEV	33.0	1.2086	********	58.25	15.584	5.626	6.823
GEOM. MEAN	62.2	2.5067	********	137.42	29.186	11.635	9.344
GEOM. STD. DEV.	1.7	1.5996	********	1.51	1.603	1.589	1.916
1ST QUARTILE	49.5	1.8175	********	99.67	19.880	8.943	5.620
2ND QUARTILE	65.3	2.5741	********	137.22	29.870	11.320	10.410
3RD QUARTILE	77.0	3.7038	********	173.37	37.855	15.164	14.296
VOL. WGT. MEAN	********	2.7433	********	148.22	32.341	12.779	10.586

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	11	13	13	12	13	11	11
MAXIMUM	48.297	3.990	11.497	15.439	39.300	1.1340	0.2841
MINIMUM	19.090	1.035	0.560	0.230	7.345	0.0000	0.0690
RANGE	29.207	2.955	10.937	15.209	31.955	1.1340	0.2151
ARITH. MEAN	30.905	2.367	2.942	5.000	24.982	0.3995	0.1664
ARITH. STD. DEV	10.365	0.946	2.907	5.202	9.643	0.3418	0.0724
GEOM. MEAN	29.420	2.176	2.089	2.990	22.916	0.3533	0.1517
GEOM. STD. DEV.	1.385	1.556	2.329	3.182	1.594	2.3901	1.5919
1ST QUARTILE	22.245	1.439	0.972	1.790	16.297	0.0955	0.1010
2ND QUARTILE	24.515	2.395	2.249	2.835	24.512	0.2775	0.1415
3RD QUARTILE	38.445	2.940	2.820	6.128	28.825	0.5765	0.2260
VOL. WGT. MEAN	28.961	2.367	2.942	4.733	24.982	0.3744	0.1558

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MCKELLAR/CUMULATIVE PRECIP. #21

PERIOD OF REPORT : DEC 31, 85 TO DEC 29,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	12	11	11	12	11	11	10
MAXIMUM	0.0639	1.509	5.2356	0.4139	0.056	6.990	0.2685
MINIMUM	0.0046	0.111	0.6199	0.0766	0.012	0.578	0.0153
RANGE	0.0593	1.398	4.6158	0.3373	0.045	6.412	0.2531
ARITH. MEAN	0.0249	0.511	2.3722	0.2282	0.030	2.132	0.0908
ARITH. STD. DEV	0.0190	0.448	1.4416	0.1076	0.013	1.786	0.0855
GEOM. MEAN	0.0191	0.376	1.9688	0.2015	0.028	1.684	0.0639
GEOM. STD. DEV.	2.1775	2.252	1.9455	1.7375	1.552	1.997	2.3906
1ST QUARTILE	0.0119	0.168	1.0738	0.1299	0.020	0.959	0.0375
2ND QUARTILE	0.0173	0.326	1.8956	0.2577	0.027	1.374	0.0514
3RD QUARTILE	0.0368	0.536	3.0481	0.2893	0.035	2.427	0.0917
VOL. WGT. MEAN	0.0236	0.479	2.2211	0.2160	0.028	1.997	0.0840

	CADMIUM MG/M**2
# OF SAMPLES	10
MAXIMUM	0.00852
MINIMUM	0.00084
RANGE	0.00768
ARITH. MEAN	0.00411
ARITH. STD. DEV	0.00288
GEOM. MEAN	0.00309
GEOM. STD. DEV.	2.32698
1ST QUARTILE	0.00138
2ND QUARTILE	0.00368
3RD QUARTILE	0.00633
VOL. WGT. MEAN	0.00380

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HERLIN/CUMULATIVE PRECIP. 802

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	193.0	11.1060	********	518.50	67.550	81.600	43.052
MINIMUM	18.0	1.4298	********	72.61	12.056	6.576	4.932
RANGE	175.0	9.6762	********	445.89	55.494	75.024	38.120
ARITH. MEAN	74.2	4.4919	********	280.35	43.026	30.138	19.796
ARITH. STD. DEV	43.6	2.5995	********	147.47	17.130	17.713	12.102
GEOM. MEAN	63.6	3.8515	********	240.37	38.966	26.219	16.329
GEOM. STD. DEV.	1.8	1.8086	********	1.85	1.657	1.761	1.965
1ST QUARTILE	48.5	2.4545	********	172.96	25.065	20.330	9.240
2ND QUARTILE	63.8	4.0519	********	248.71	44.972	27.100	16.440
3RD QUARTILE	88.3	5.2743	********	362.45	54.646	30.310	24.984
VOL. WGT. MEAN	********	4.4919	********	280.35	43.026	30.138	19.796

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	13	13	12	13	13	13	12
MAXIMUM	130.988	18.275	11.908	34.808	59.500	6.1200	0.5950
MINIMUM	7.124	0.959	0.822	0.685	6.713	0.0000	0.0548
RANGE	123.864	17.316	11.086	34.123	52.787	6.1200	0.5402
ARITH. MEAN	46.651	5.760	3.457	7.665	33.243	0.8737	0.2665
ARITH. STD. DEV	32.052	4.184	3.140	9.341	18.039	1.6107	0.1411
GEOM. MEAN	37.265	4.716	2.483	4.200	27.840	0.5909	0.2310
GEOM. STD. DEV.	2.097	1.967	2.345	3.264	1.960	2.7996	1.8219
1ST QUARTILE	22.112	3.355	1.130	1.775	17.904	0.1744	0.1764
2ND QUARTILE	37.085	5.081	3.065	3.555	25.303	0.4604	0.2468
3RD QUARTILE	58.619	6.195	4.233	9.251	48.602	0.6086	0.3193
VOL. WGT. MEAN	46.651	5.760	3.500	7.665	33.243	0.8737	0.2718

******** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HERLIN/CUMULATIVE PRECIP. 802

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	12	12	12	12	12	12	12
MAXIMUM	0.2883	4.097	5.1194	1.6888	0.077	5.087	0.3483
MINIMUM	0.0082	0.220	0.8795	0.1341	0.011	0.842	0.0225
RANGE	0.2801	3.878	4.2398	1.5548	0.066	4.245	0.3658
ARITH. MEAN	0.0423	0.856	2.9081	0.5487	0.031	2.831	0.0783
ARITH. STD. DEV	0.0780	1.050	1.1747	0.4456	0.017	1.383	0.1002
GEOM. MEAN	0.0224	0.604	2.6581	0.4261	0.028	2.442	0.0542
GEOM. STD. DEV.	2.5662	2.128	1.6055	2.0899	1.676	1.859	2.1528
1ST QUARTILE	0.0122	0.388	2.2403	0.3252	0.019	1.756	0.0290
2ND QUARTILE	0.0190	0.499	2.7784	0.3940	0.030	2.858	0.0521
3RD QUARTILE	0.0297	0.847	3.5901	0.6396	0.038	3.849	0.0717
VOL. WGT. MEAN	0.0431	0.873	2.9660	0.5597	0.032	2.888	0.0798

	CADMIUM MG/M**2
# OF SAMPLES	12
MAXIMUM	0.01206
MINIMUM	0.00104
RANGE	0.01102
ARITH. MEAN	0.00526
ARITH. STD. DEV	0.00366
GEOM. MEAN	0.00385
GEOM. STD. DEV.	2.46718
1ST QUARTILE	0.00166
2ND QUARTILE	0.00613
3RD QUARTILE	0.00788
VOL. WGT. MEAN	0.00537

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOONBEAM/CUMULATIVE PRECIP. #27

PERIOD OF REPORT : DEC 31, 85 TO DEC 29,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	11	10	0	10	10	10	10
MAXIMUM	70.0	1.6792	********	140.00	23.490	68.880	19.600
MINIMUM	13.5	0.0024	********	26.40	5.400	2.400	2.400
RANGE	56.5	1.6767	********	113.60	18.090	66.480	17.200
ARITH. MEAN	42.1	0.7325	********	75.96	10.369	14.452	5.411
ARITH. STD. DEV	17.8	0.5546	********	34.62	5.247	19.969	5.080
GEOM. MEAN	38.0	0.3743	********	67.82	9.476	8.587	4.380
GEOM. STD. DEV.	1.6	6.7061	********	1.71	1.570	2.651	1.799
1ST QUARTILE	24.8	0.2340	********	42.00	6.900	4.060	2.900
2ND QUARTILE	41.8	0.7087	********	77.30	8.870	7.260	3.800
3RD QUARTILE	55.0	0.9026	********	92.42	11.530	11.650	4.920
VOL. WGT. MEAN	********	0.6860	********	71.13	9.710	13.533	5.067

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	10	10	10	10	10	10	9
MAXIMUM	29.400	13.720	4.200	13.440	20.400	1.7400	0.3000
MINIMUM	3.840	0.350	0.000	0.000	1.800	0.0600	0.0600
RANGE	25.560	13.370	4.200	13.440	18.600	1.6800	0.2400
ARITH. MEAN	13.199	2.667	1.739	3.275	9.688	0.5448	0.1334
ARITH. STD. DEV	8.951	3.996	1.249	3.787	6.898	0.5868	0.0902
GEOM. MEAN	10.612	1.504	1.575	2.397	7.299	0.3251	0.1133
GEOM. STD. DEV.	2.028	2.751	1.749	2.116	2.316	2.9652	1.7750
1ST QUARTILE	5.640	0.735	0.780	1.075	3.840	0.1300	0.0750
2ND QUARTILE	10.157	1.350	1.492	2.600	7.980	0.2962	0.0915
3RD QUARTILE	18.350	1.800	2.046	3.062	14.590	0.5856	0.1160
VOL. WGT. MEAN	12.360	2.497	1.628	3.067	9.072	0.5101	0.1199

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HOONBEAM/CUMULATIVE PRECIP. #27

PERIOD OF REPORT : DEC 31, 85 TO DEC 29,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	9	9	9	9	9	9	9
MAXIMUM	0.0174	1.057	2.3899	0.9854	0.035	6.918	0.6940
MINIMUM	0.0080	0.082	0.4638	0.0723	0.009	0.477	0.0183
RANGE	0.0094	0.975	1.9261	0.9132	0.026	6.441	0.6757
ARITH. MEAN	0.0117	0.349	1.1838	0.1993	0.019	1.912	0.1360
ARITH. STD. DEV	0.0032	0.330	0.6120	0.2955	0.008	2.059	0.2145
GEOM. MEAN	0.0113	0.242	1.0456	0.1280	0.018	1.328	0.0697
GEOM. STD. DEV.	1.3125	2.468	1.7158	2.2018	1.517	2.321	3.0045
1ST QUARTILE	0.0085	0.096	0.6076	0.0865	0.014	0.712	0.0321
2ND QUARTILE	0.0110	0.222	1.0461	0.1023	0.018	1.117	0.0464
3RD QUARTILE	0.0130	0.326	1.4370	0.1075	0.022	1.405	0.0954
VOL. WGT. MEAN	0.0105	0.313	1.0640	0.1791	0.018	1.718	0.1222

	CADMIUM MG/M**2
# OF SAMPLES	9
MAXIMUM	0.02828
MINIMUM	0.00080
RANGE	0.02747
ARITH. MEAN	0.00733
ARITH. STD. DEV	0.01007
GEOM. MEAN	0.00299
GEOM. STD. DEV.	4.02851
1ST QUARTILE	0.00110
2ND QUARTILE	0.00130
3RD QUARTILE	0.00651
VOL. WGT. MEAN	0.00659

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOOSONEE/CUMULATIVE PRECIP. #39

PERIOD OF REPORT : DEC 29, 85 TO AUG 12,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	5	4	0	5	5	4	5
MAXIMUM :	165.0	2.3307	********	206.25	21.450	44.550	11.550
MINIMUM :	3.5	0.1600	********	8.23	0.595	0.490	0.735
RANGE :	161.5	2.1707	********	198.02	20.855	44.060	10.815
ARITH. MEAN :	57.9	1.0506	********	62.20	10.226	14.100	7.463
ARITH. STD. DEV :	64.1	0.9201	********	81.74	9.910	20.601	4.695
GEOM. MEAN :	30.6	0.7189	********	34.41	5.462	4.722	5.255
GEOM. STD. DEV. :	4.2	3.0539	********	3.27	4.349	6.732	3.199
1ST QUARTILE :	11.5	0.4446	********	15.49	2.345	1.545	2.642
2ND QUARTILE :	28.0	0.8559	********	24.54	4.322	5.680	6.857
3RD QUARTILE :	50.8	1.6565	********	36.89	12.495	26.655	10.240
VOL. WGT. MEAN :	********	0.9012	********	62.20	10.226	12.095	7.463

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	5	4	5	5	5	5	5
MAXIMUM :	42.900	5.775	3.300	8.250	31.350	0.3300	0.3300
MINIMUM :	0.455	0.122	0.070	0.490	0.175	0.0000	0.0035
RANGE :	42.445	5.652	3.230	7.760	31.175	0.3300	0.3265
ARITH. MEAN :	13.126	2.139	1.280	4.623	8.760	0.1218	0.1021
ARITH. STD. DEV :	17.123	2.551	1.213	3.217	13.139	0.1257	0.1303
GEOM. MEAN :	5.747	0.980	0.742	3.189	2.151	0.1859	0.0463
GEOM. STD. DEV. :	5.263	5.199	4.176	3.183	8.947	2.1776	5.2021
1ST QUARTILE :	2.502	0.386	0.425	1.382	0.250	0.0263	0.0212
2ND QUARTILE :	5.297	1.329	0.877	3.721	1.576	0.0810	0.0520
3RD QUARTILE :	8.862	3.891	1.126	6.051	5.976	0.1132	0.0690
VOL. WGT. MEAN :	13.126	1.835	1.280	4.623	8.760	0.1218	0.1021

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOOSONEE/CUMULATIVE PRECIP. 839

PERIOD OF REPORT : DEC 29, 85 TO AUG 12,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	5	5	5	5	5	5	5
MAXIMUM	0.1423	0.519	2.2126	0.2368	0.066	9.113	0.0966
MINIMUM	0.0010	0.094	0.0680	0.0131	0.001	0.173	0.0078
RANGE	0.1413	0.425	2.1447	0.2237	0.065	8.940	0.0887
ARITH. MEAN	0.0406	0.222	1.2031	0.1148	0.023	3.664	0.0399
ARITH. STD. DEV	0.0580	0.174	0.8159	0.0887	0.026	3.562	0.0342
GEOM. MEAN	0.0154	0.179	0.7612	0.0785	0.012	1.966	0.0291
GEOM. STD. DEV.	5.9752	2.015	4.0591	3.1029	4.238	4.574	2.5411
1ST QUARTILE	0.0070	0.095	0.4311	0.0364	0.005	0.965	0.0135
2ND QUARTILE	0.0133	0.147	1.0574	0.0778	0.011	1.889	0.0275
3RD QUARTILE	0.0233	0.199	1.4704	0.1322	0.020	3.638	0.0380
VOL. WGT. MEAN	0.0406	0.222	1.2031	0.1148	0.023	3.664	0.0399

	CADMIUM MG/M**2
# OF SAMPLES	5
MAXIMUM	0.02263
MINIMUM	0.00077
RANGE	0.02186
ARITH. MEAN	0.00661
ARITH. STD. DEV	0.00911
GEOM. MEAN	0.00328
GEOM. STD. DEV.	3.71058
1ST QUARTILE	0.00103
2ND QUARTILE	0.00230
3RD QUARTILE	0.00418
VOL. WGT. MEAN	0.00661

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : OTTER ISLAND/CUMULATIVE PRECIP. #38

PERIOD OF REPORT : APR 22, 86 TO NOV 4,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	7	7	0	7	7	7	7
MAXIMUM	92.0	4.2120	********	246.40	25.520	28.600	5.670
MINIMUM	27.0	0.6894	********	46.00	9.200	9.400	2.760
RANGE	65.0	3.5225	********	200.40	16.320	19.200	2.910
ARITH. MEAN	64.0	1.6970	********	133.74	18.569	20.097	4.390
ARITH. STD. DEV	24.0	1.2933	********	64.84	5.254	6.722	1.083
GEOM. MEAN	59.5	1.3630	********	119.66	17.798	18.966	4.262
GEOM. STD. DEV.	1.5	2.0000	********	1.70	1.396	1.473	1.312
1ST QUARTILE	37.0	0.7101	********	71.60	12.140	12.060	2.940
2ND QUARTILE	56.5	0.9312	********	114.82	19.085	19.700	4.510
3RD QUARTILE	84.5	2.1922	********	158.47	21.005	24.280	5.080
VOL. WGT. MEAN	********	1.6970	********	133.74	18.569	20.097	4.390

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	7	7	7	7	7	7	7
MAXIMUM	34.160	4.680	3.050	2.430	26.840	0.9880	0.4050
MINIMUM	4.600	1.380	0.000	0.000	5.520	0.0000	0.0470
RANGE	29.560	3.300	3.050	2.430	21.320	0.9880	0.3580
ARITH. MEAN	23.224	3.004	1.295	1.079	19.236	0.3053	0.2247
ARITH. STD. DEV	9.279	1.293	0.985	0.775	7.097	0.3513	0.1439
GEOM. MEAN	20.293	2.730	1.249	1.096	17.493	0.4483	0.1736
GEOM. STD. DEV.	1.962	1.642	1.787	1.675	1.712	2.1147	2.3409
1ST QUARTILE	12.640	1.395	0.235	0.220	10.985	0.0000	0.0675
2ND QUARTILE	23.715	2.940	1.182	0.990	19.225	0.1420	0.1985
3RD QUARTILE	27.850	3.837	1.590	1.352	23.695	0.4325	0.3180
VOL. WGT. MEAN	23.224	3.004	1.295	1.079	19.236	0.3053	0.2247

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : OTTER ISLAND/CUMULATIVE PRECIP. 038

PERIOD OF REPORT : APR 22, 86 TO NOV 4,86

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	7	7	7	7	7	7	7
MAXIMUM	0.0184	1.070	3.3561	0.9642	0.037	4.604	0.0945
MINIMUM	0.0081	0.190	0.4229	0.1589	0.011	0.655	0.0345
RANGE	0.0103	0.881	2.9332	0.8052	0.026	3.949	0.0600
ARITH. MEAN	0.0139	0.453	1.7907	0.4413	0.026	2.059	0.0662
ARITH. STD. DEV	0.0038	0.307	1.1625	0.2881	0.010	1.339	0.0240
GEOM. MEAN	0.0134	0.381	1.4249	0.3698	0.024	1.742	0.0621
GEOM. STD. DEV.	1.3498	1.860	2.1805	1.8999	1.545	1.865	1.4970
1ST QUARTILE	0.0092	0.191	0.5590	0.1862	0.015	1.021	0.0362
2ND QUARTILE	0.0131	0.325	1.2577	0.3237	0.023	1.521	0.0648
3RD QUARTILE	0.0169	0.534	2.7728	0.5525	0.034	2.363	0.0835
VOL. WGT. MEAN	0.0139	0.453	1.7907	0.4413	0.026	2.059	0.0662

	CADMIUM
	MG/M**2
# OF SAMPLES	7
MAXIMUM	0.00459
MINIMUM	0.00000
RANGE	0.00459
ARITH. MEAN	0.00203
ARITH. STD. DEV	0.00160
GEOM. MEAN	0.00493
GEOM. STD. DEV.	2.62625
1ST QUARTILE	0.00052
2ND QUARTILE	0.00149
3RD QUARTILE	0.00280
VOL. WGT. MEAN	0.00203

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PALMERSTON/CUMULATIVE PRECIP. 806

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	12	10	0	11	11	9	11
MAXIMUM	205.0	10.7586	********	686.75	69.700	38.950	39.200
MINIMUM	24.5	0.2832	********	20.00	5.600	5.850	3.600
RANGE	180.5	10.4754	********	666.75	64.100	33.100	35.600
ARITH. MEAN	69.4	3.6000	********	219.79	33.967	20.058	12.564
ARITH. STD. DEV	48.3	3.0019	********	176.60	17.091	11.465	9.773
GEOM. MEAN	58.7	2.4425	********	164.21	29.182	17.034	10.185
GEOM. STD. DEV.	1.8	2.8935	********	2.42	1.923	1.880	1.935
1ST QUARTILE	37.5	1.1603	********	107.12	22.525	9.886	5.400
2ND QUARTILE	61.3	2.8796	********	171.76	30.134	17.440	9.696
3RD QUARTILE	82.0	4.7431	********	238.37	43.007	24.050	14.525
VOL. WGT. MEAN	********	3.4023	********	221.12	34.172	18.043	12.639

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	9	10	9	10	10	10	10
MAXIMUM	94.300	7.472	4.755	5.389	84.050	0.7200	0.4410
MINIMUM	20.650	1.125	0.900	0.900	2.600	0.0000	0.0450
RANGE	73.650	6.348	3.855	4.489	81.450	0.7200	0.3960
ARITH. MEAN	47.583	4.165	2.141	3.470	36.868	0.3054	0.2068
ARITH. STD. DEV	22.109	2.157	1.378	1.789	22.524	0.2750	0.1170
GEOM. MEAN	43.327	3.602	1.830	2.916	28.219	0.5117	0.1745
GEOM. STD. DEV.	1.589	1.831	1.770	1.981	2.583	1.6983	1.9327
1ST QUARTILE	31.194	2.073	1.233	1.287	19.401	0.0000	0.1117
2ND QUARTILE	40.750	3.950	1.412	3.823	35.600	0.2264	0.1925
3RD QUARTILE	54.555	5.080	2.112	5.022	41.458	0.5500	0.2582
VOL. WGT. MEAN	42.803	4.021	1.926	3.350	34.843	0.2948	0.1996

**** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PALMERSTON/CUMULATIVE PRECIP. 606

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	9	10	10	10	10	9	10
MAXIMUM	0.3690	1.059	3.0524	1.5921	0.082	27.237	0.4991
MINIMUM	0.0070	0.291	0.6828	0.0898	0.010	0.677	0.0143
RANGE	0.3620	0.767	2.3696	1.5023	0.072	26.560	0.4848
ARITH. MEAN	0.0628	0.531	1.4965	0.3512	0.029	4.846	0.0987
ARITH. STD. DEV	0.1163	0.255	0.8310	0.4676	0.021	8.492	0.1444
GEOM. MEAN	0.0264	0.482	1.3089	0.2152	0.025	2.254	0.0571
GEOM. STD. DEV.	3.3709	1.578	1.7197	2.5100	1.803	3.177	2.6916
1ST QUARTILE	0.0115	0.303	0.7333	0.1155	0.016	0.771	0.0275
2ND QUARTILE	0.0179	0.498	1.2149	0.1412	0.024	2.051	0.0469
3RD QUARTILE	0.0368	0.609	1.9343	0.2719	0.032	2.729	0.0874
VOL. WGT. MEAN	0.0565	0.513	1.4448	0.3390	0.028	4.359	0.0953

	CADMIUM MG/M**2
# OF SAMPLES	10
MAXIMUM	0.01648
MINIMUM	0.00070
RANGE	0.01578
ARITH. MEAN	0.00611
ARITH. STD. DEV	0.00520
GEOM. MEAN	0.00378
GEOM. STD. DEV.	3.23625
1ST QUARTILE	0.00082
2ND QUARTILE	0.00506
3RD QUARTILE	0.00822
VOL. WGT. MEAN	0.00589

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. #36

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	103.6	1.5324	########	150.22	23.828	26.400	14.820
MINIMUM	13.0	0.0071	########	8.45	2.210	0.942	1.620
RANGE	90.6	1.5253	########	141.77	21.618	25.458	13.200
ARITH. MEAN	50.2	0.4507	########	43.12	8.283	9.792	5.135
ARITH. STD. DEV	28.6	0.4197	########	36.72	5.608	7.686	3.559
GEOM. MEAN	42.6	0.2437	########	33.09	6.851	6.848	4.263
GEOM. STD. DEV.	1.9	4.3492	########	2.13	1.913	2.656	1.867
1ST QUARTILE	25.4	0.1390	########	21.35	3.887	3.620	2.460
2ND QUARTILE	44.0	0.3268	########	34.94	7.866	7.268	4.110
3RD QUARTILE	61.1	0.5787	########	43.20	9.336	12.528	5.466
VOL. WGT. MEAN	########	0.4507	########	43.12	8.283	9.792	5.135

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	12	13	13	13	13	12	13
MAXIMUM	39.368	3.360	6.916	26.182	34.188	0.8400	0.3108
MINIMUM	2.470	0.314	0.106	0.000	0.157	0.0000	0.0130
RANGE	36.898	3.046	6.810	26.182	34.031	0.8400	0.2978
ARITH. MEAN	13.460	1.606	2.082	3.722	9.324	0.4256	0.1486
ARITH. STD. DEV	9.944	1.062	1.822	6.877	9.470	0.2580	0.1079
GEOM. MEAN	10.422	1.264	1.353	2.159	5.136	0.4401	0.1040
GEOM. STD. DEV.	2.201	2.152	3.040	2.351	4.031	1.7138	2.7003
1ST QUARTILE	6.829	0.670	0.739	0.990	3.056	0.2583	0.0482
2ND QUARTILE	11.870	1.310	1.455	1.720	6.360	0.4328	0.1184
3RD QUARTILE	17.180	1.980	2.655	2.389	9.830	0.5664	0.2343
VOL. WGT. MEAN	14.644	1.606	2.082	3.722	9.324	0.4630	0.1486

: INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PICKLE LAKE/CUMULATIVE PRECIP. 036

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0207	1.275	13.5158	1.0769	0.041	10.680	1.5373
MINIMUM	0.0050	0.056	0.2759	0.0410	0.005	0.462	0.0122
RANGE	0.0157	1.219	13.2400	1.0359	0.036	10.219	1.5251
ARITH. MEAN	0.0108	0.244	2.6527	0.2565	0.020	2.604	0.1775
ARITH. STD. DEV	0.0051	0.325	3.6625	0.2909	0.011	2.893	0.4275
GEOM. MEAN	0.0098	0.160	1.3718	0.1653	0.017	1.685	0.0430
GEOM. STD. DEV.	1.5891	2.284	3.2164	2.5544	1.858	2.539	4.0063
1ST QUARTILE	0.0064	0.097	0.6495	0.0979	0.010	0.760	0.0214
2ND QUARTILE	0.0101	0.118	0.8903	0.1312	0.018	1.362	0.0265
3RD QUARTILE	0.0122	0.192	2.2736	0.2347	0.024	2.760	0.0362
VOL. WGT. MEAN	0.0108	0.244	2.6527	0.2565	0.020	2.604	0.1775

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.01140
MINIMUM	0.00050
RANGE	0.01089
ARITH. MEAN	0.00264
ARITH. STD. DEV	0.00383
GEOM. MEAN	0.00146
GEOM. STD. DEV.	2.67085
1ST QUARTILE	0.00088
2ND QUARTILE	0.00107
3RD QUARTILE	0.00146
VOL. WGT. MEAN	0.00264

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. 803

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	150.0	8.2431	********	442.50	67.424	51.000	27.440
MINIMUM	17.0	0.4370	********	72.25	9.010	7.568	2.380
RANGE	133.0	7.8062	********	370.25	58.414	43.432	25.060
ARITH. MEAN	71.6	4.7030	********	244.32	42.193	26.608	12.099
ARITH. STD. DEV	35.0	2.3785	********	120.69	18.266	10.764	6.526
GEOM. MEAN	62.1	3.7965	********	209.62	37.233	24.356	10.389
GEOM. STD. DEV.	1.8	2.2753	********	1.87	1.792	1.598	1.856
1ST QUARTILE	42.7	2.4434	********	124.02	29.970	19.130	6.970
2ND QUARTILE	75.8	4.8733	********	261.30	40.369	26.210	11.076
3RD QUARTILE	85.0	6.0517	********	306.75	55.317	29.484	14.193
VOL. WGT. MEAN	********	4.7030	********	244.32	42.193	26.608	12.099

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	66.000	5.131	7.700	8.624	54.000	2.8000	0.4704
MINIMUM	4.080	1.105	0.172	0.595	3.400	0.0000	0.0510
RANGE	61.920	4.026	7.528	8.029	50.600	2.8000	0.4194
ARITH. MEAN	30.061	3.509	1.898	3.177	26.400	0.4174	0.2210
ARITH. STD. DEV	18.539	1.480	1.945	2.269	15.214	0.7704	0.1330
GEOM. MEAN	24.017	3.136	1.214	2.476	21.231	0.5433	0.1814
GEOM. STD. DEV.	2.168	1.708	2.887	2.163	2.181	2.5056	2.0001
1ST QUARTILE	16.636	1.916	0.601	1.628	12.877	0.0000	0.1132
2ND QUARTILE	24.310	3.660	1.390	2.125	25.107	0.1103	0.1615
3RD QUARTILE	35.797	4.719	2.162	4.012	32.956	0.3145	0.2951
VOL. WGT. MEAN	30.061	3.509	1.898	3.177	26.399	0.4174	0.2210

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PORT STANLEY/CUMULATIVE PRECIP. 803

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.2932	1.254	12.6930	2.7657	0.132	13.845	0.2883
MINIMUM	0.0034	0.156	0.7082	0.0876	0.007	0.708	0.0124
RANGE	0.2898	1.098	11.9847	2.6781	0.125	13.137	0.2759
ARITH. MEAN	0.0380	0.554	2.9132	0.5506	0.040	3.234	0.0685
ARITH. STD. DEV	0.0771	0.321	3.1375	0.6989	0.033	3.347	0.0784
GEOM. MEAN	0.0184	0.464	2.0895	0.3575	0.030	2.432	0.0452
GEOM. STD. DEV.	2.7721	1.915	2.2076	2.4548	2.244	2.056	2.4268
1ST QUARTILE	0.0121	0.265	1.1831	0.2030	0.017	1.471	0.0261
2ND QUARTILE	0.0170	0.523	1.9223	0.2950	0.033	2.393	0.0327
3RD QUARTILE	0.0193	0.655	2.9318	0.5604	0.037	2.974	0.0567
VOL. WGT. MEAN	0.0380	0.554	2.9132	0.5506	0.040	3.234	0.0685

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.00862
MINIMUM	0.00034
RANGE	0.00828
ARITH. MEAN	0.00391
ARITH. STD. DEV	0.00261
GEOM. MEAN	0.00290
GEOM. STD. DEV.	2.50377
1ST QUARTILE	0.00170
2ND QUARTILE	0.00313
3RD QUARTILE	0.00549
VOL. WGT. MEAN	0.00391

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	11	11	0	11	11	11	11
MAXIMUM	166.0	2.1966	********	290.72	42.976	26.544	10.112
MINIMUM	13.7	0.0092	********	9.34	4.110	0.940	1.880
RANGE	152.3	2.1874	********	281.37	38.866	25.604	8.232
ARITH. MEAN	55.0	0.6148	********	63.58	13.138	9.476	4.188
ARITH. STD. DEV	48.2	0.5825	********	82.32	12.206	8.899	2.991
GEOM. MEAN	41.6	0.3749	********	36.81	9.866	5.915	3.505
GEOM. STD. DEV.	2.1	3.9392	********	2.87	2.095	2.969	1.797
1ST QUARTILE	24.1	0.2698	********	11.70	5.184	2.097	2.063
2ND QUARTILE	33.7	0.4119	********	31.30	8.802	5.898	3.084
3RD QUARTILE	56.9	0.6919	********	58.00	11.865	14.653	4.004
VOL. WGT. MEAN	********	0.6148	********	63.58	13.138	9.476	4.188

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	10	11	11	11	11	10	10
MAXIMUM	79.632	5.175	5.810	5.688	72.680	1.0112	0.7584
MINIMUM	1.880	0.205	0.000	0.000	0.705	0.0000	0.0235
RANGE	77.752	4.969	5.810	5.688	71.975	1.0112	0.7349
ARITH. MEAN	20.314	1.667	1.427	2.009	15.261	0.3825	0.1856
ARITH. STD. DEV	24.960	1.834	2.209	1.578	21.625	0.2582	0.2268
GEOM. MEAN	10.740	0.955	0.895	1.568	6.512	0.4223	0.1067
GEOM. STD. DEV.	3.356	3.092	3.443	2.558	4.315	1.5589	2.9493
1ST QUARTILE	3.771	0.318	0.000	0.634	1.511	0.2510	0.0479
2ND QUARTILE	12.268	0.745	0.240	1.772	6.411	0.3475	0.0732
3RD QUARTILE	18.704	1.986	1.456	2.506	13.829	0.4117	0.2214
VOL. WGT. MEAN	18.896	1.667	1.427	2.009	15.261	0.3558	0.1727

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/CUMULATIVE PRECIP. #32

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	10	10	10	10	10	10	10
MAXIMUM	0.0332	0.846	10.1575	0.7980	0.066	8.602	0.3796
MINIMUM	0.0047	0.077	0.2219	0.0637	0.009	0.616	0.0127
RANGE	0.0285	0.770	9.9356	0.7343	0.057	7.986	0.3668
ARITH. MEAN	0.0132	0.210	2.2654	0.1933	0.024	2.163	0.0680
ARITH. STD. DEV	0.0109	0.230	2.9504	0.2242	0.019	2.425	0.1113
GEOM. MEAN	0.0100	0.156	1.3204	0.1352	0.019	1.471	0.0365
GEOM. STD. DEV.	2.1385	2.024	2.8885	2.1906	1.984	2.363	2.7386
1ST QUARTILE	0.0051	0.095	0.6501	0.0772	0.010	0.670	0.0169
2ND QUARTILE	0.0081	0.120	1.0427	0.0969	0.016	1.220	0.0305
3RD QUARTILE	0.0171	0.204	2.2180	0.1728	0.023	2.413	0.0497
VOL. WGT. MEAN	0.0123	0.195	2.1072	0.1798	0.022	2.012	0.0632

	CADMIUM MG/M**2
# OF SAMPLES	10
MAXIMUM	0.03910
MINIMUM	0.00057
RANGE	0.03853
ARITH. MEAN	0.00692
ARITH. STD. DEV	0.01181
GEOM. MEAN	0.00283
GEOM. STD. DEV.	3.69946
1ST QUARTILE	0.00107
2ND QUARTILE	0.00177
3RD QUARTILE	0.00608
VOL. WGT. MEAN	0.00644

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SHALLOW LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 31, 85 TO DEC 31,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	12	12	0	12	12	12	12
MAXIMUM :	266.0	7.8502	********	385.70	63.840	45.950	23.940
MINIMUM :	16.4	0.4119	********	31.98	11.152	7.200	3.150
RANGE :	249.6	7.4383	********	353.72	52.688	38.750	20.790
ARITH. MEAN :	76.9	3.2998	********	175.43	34.950	17.351	10.013
ARITH. STD. DEV :	64.4	2.2066	********	106.44	16.601	10.964	6.406
GEOM. MEAN :	61.1	2.5982	********	146.23	31.032	14.825	8.246
GEOM. STD. DEV. :	2.0	2.2038	********	1.95	1.705	1.777	1.949
1ST QUARTILE :	41.1	1.8423	********	113.34	21.780	9.025	4.713
2ND QUARTILE :	65.3	2.5244	********	124.20	35.812	16.200	9.136
3RD QUARTILE :	86.8	4.7203	********	246.40	45.033	21.175	13.430
VOL. WGT. MEAN :	********	3.2998	********	175.43	34.950	17.351	10.013

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	12	12	12	12	12	12	11
MAXIMUM :	146.960	5.514	5.010	8.731	49.210	11.6900	0.4595
MINIMUM :	5.904	0.902	0.082	0.450	4.100	0.0000	0.0328
RANGE :	141.056	4.612	4.928	8.281	45.110	11.6900	0.4267
ARITH. MEAN :	44.317	3.113	1.697	3.005	25.429	1.1782	0.1772
ARITH. STD. DEV :	42.378	1.739	1.477	2.464	14.617	3.3159	0.1230
GEOM. MEAN :	30.713	2.643	1.126	2.166	20.990	0.5056	0.1383
GEOM. STD. DEV. :	2.458	1.860	2.963	2.413	2.032	3.3204	2.2040
1ST QUARTILE :	17.160	1.655	0.799	1.222	14.656	0.0410	0.0676
2ND QUARTILE :	32.740	2.409	1.090	2.140	21.068	0.2445	0.1441
3RD QUARTILE :	50.348	4.960	2.251	4.729	35.530	0.3950	0.2440
VOL. WGT. MEAN :	44.317	3.113	1.697	3.005	25.429	1.1782	0.1785

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SHALLON LAKE/CUMULATIVE PRECIP. #09

PERIOD OF REPORT : DEC 31, 85 TO DEC 31,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	11	11	11	11	11	11	11
MAXIMUM	0.0532	1.913	3.6760	0.8993	0.106	4.845	0.2284
MINIMUM	0.0033	0.123	0.4553	0.0766	0.007	0.464	0.0097
RANGE	0.0499	1.790	3.2207	0.8227	0.100	4.381	0.2187
ARITH. MEAN	0.0196	0.420	1.5680	0.2944	0.031	2.078	0.0625
ARITH. STD. DEV	0.0164	0.507	0.9774	0.2327	0.027	1.313	0.0621
GEOM. MEAN	0.0146	0.300	1.3095	0.2322	0.025	1.709	0.0425
GEOM. STD. DEV.	2.2649	2.095	1.8979	2.0478	2.035	1.988	2.5436
1ST QUARTILE	0.0077	0.175	0.7230	0.1102	0.015	0.968	0.0161
2ND QUARTILE	0.0142	0.245	1.1020	0.2204	0.022	1.703	0.0408
3RD QUARTILE	0.0196	0.400	2.1782	0.3446	0.035	2.624	0.0778
VOL. WGT. MEAN	0.0198	0.423	1.5803	0.2967	0.032	2.094	0.0630

	CADMIUN MG/M**2
# OF SAMPLES	11
MAXIMUM	0.01862
MINIMUM	0.00064
RANGE	0.01798
ARITH. MEAN	0.00465
ARITH. STD. DEV	0.00539
GEOM. MEAN	0.00267
GEOM. STD. DEV.	3.06844
1ST QUARTILE	0.00078
2ND QUARTILE	0.00252
3RD QUARTILE	0.00619
VOL. WGT. MEAN	0.00469

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	139.0	10.2181	********	552.27	66.490	59.340	17.440
MINIMUM	33.0	1.4405	********	54.45	15.470	6.480	4.512
RANGE	106.0	8.7776	********	497.82	51.020	52.860	12.928
ARITH. MEAN	77.6	4.1877	********	241.24	38.152	25.432	10.122
ARITH. STD. DEV	38.3	2.7681	********	159.31	14.711	16.376	3.629
GEOM. MEAN	68.9	3.4421	********	190.46	35.527	20.554	9.499
GEOM. STD. DEV.	1.7	1.9233	********	2.13	1.496	2.029	1.464
1ST QUARTILE	43.5	1.7223	********	99.60	28.890	11.485	7.120
2ND QUARTILE	62.7	3.2283	********	199.04	35.730	21.665	9.975
3RD QUARTILE	100.0	5.0914	********	310.12	40.375	30.042	11.500
VOL. WGT. MEAN	********	4.1877	********	241.24	38.152	25.432	10.122

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	55.590	16.905	6.540	8.225	52.533	1.3470	0.6900
MINIMUM	2.730	0.600	0.000	0.000	1.820	0.1080	0.0660
RANGE	52.860	16.305	6.540	8.225	50.713	1.2390	0.6240
ARITH. MEAN	30.047	4.371	1.655	3.694	24.592	0.5588	0.2432
ARITH. STD. DEV	19.514	4.425	1.820	2.591	17.618	0.3896	0.1913
GEOM. MEAN	21.772	3.000	1.412	2.990	16.534	0.4359	0.1870
GEOM. STD. DEV.	2.652	2.439	2.180	1.970	2.943	2.1738	2.1044
1ST QUARTILE	12.810	1.566	0.141	1.581	6.630	0.2560	0.1019
2ND QUARTILE	25.812	2.447	1.073	3.135	24.327	0.4580	0.1400
3RD QUARTILE	44.755	5.212	2.345	4.625	35.817	0.6210	0.3147
VOL. WGT. MEAN	30.047	4.371	1.655	3.694	24.592	0.5588	0.2432

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SMITH'S FALLS/CUMULATIVE PRECIP. #15

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0278	0.955	3.3866	0.8439	0.056	3.035	0.2244
MINIMUM	0.0066	0.205	0.6048	0.0858	0.014	0.808	0.0145
RANGE	0.0212	0.751	2.7818	0.7580	0.041	2.227	0.2099
ARITH. MEAN	0.0183	0.476	1.6024	0.3506	0.032	1.676	0.0609
ARITH. STD. DEV	0.0064	0.194	0.8492	0.2193	0.015	0.714	0.0593
GEOM. MEAN	0.0171	0.445	1.4155	0.2918	0.029	1.536	0.0443
GEOM. STD. DEV.	1.4946	1.461	1.6766	1.9185	1.631	1.556	2.1976
1ST QUARTILE	0.0139	0.370	0.9319	0.1664	0.019	0.991	0.0242
2ND QUARTILE	0.0177	0.412	1.2396	0.3074	0.025	1.514	0.0389
3RD QUARTILE	0.0229	0.491	1.8951	0.3965	0.044	2.069	0.0575
VOL. WGT. MEAN	0.0183	0.476	1.6024	0.3806	0.032	1.676	0.0609

	CADMIUM MG/M**2
# OF SAMPLES	12
MAXIMUM	0.00560
MINIMUM	0.00066
RANGE	0.00494
ARITH. MEAN	0.00300
ARITH. STD. DEV	0.00161
GEOM. MEAN	0.00253
GEOM. STD. DEV.	1.93536
1ST QUARTILE	0.00160
2ND QUARTILE	0.00274
3RD QUARTILE	0.00452
VOL. WGT. MEAN	0.00303

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/CUMULATIVE PRECIP./7011

PERIOD OF REPORT : OCT 6, 86 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	2	2	0	2	2	2	2
MAXIMUM	72.5	4.4703	********	199.37	42.775	13.050	7.975
MINIMUM	65.0	1.5956	********	65.00	16.900	2.600	4.550
RANGE	7.5	2.8748	********	134.37	25.875	10.450	3.425
ARITH. MEAN	68.8	3.0329	********	132.19	29.837	7.825	6.262
ARITH. STD. DEV	5.3	2.0328	********	95.02	18.296	7.389	2.422
GEOM. MEAN	68.6	2.6707	********	113.84	26.887	5.825	6.024
GEOM. STD. DEV.	1.1	2.0719	********	2.21	1.928	3.129	1.487
1ST QUARTILE	********	********	********	********	********	********	********
2ND QUARTILE	********	********	********	********	********	********	********
3RD QUARTILE	********	********	********	********	********	********	********
VOL. WGT. MEAN	0.0	6.0659	********	264.37	59.675	15.650	12.525

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	2	2	2	2	2	2	2
MAXIMUM	34.800	1.450	2.175	5.625	26.100	1.5225	0.1450
MINIMUM	10.400	0.325	0.000	1.950	4.225	0.3250	0.0650
RANGE	24.400	1.125	2.175	1.675	21.875	1.1975	0.0800
ARITH. MEAN	22.600	0.887	1.087	2.787	15.162	0.9237	0.1050
ARITH. STD. DEV	17.253	0.795	1.538	1.184	15.468	0.8468	0.0566
GEOM. MEAN	19.024	0.686	1.475	2.659	10.501	0.7034	0.0971
GEOM. STD. DEV.	2.349	2.879	1.475	1.550	3.624	2.9801	1.7636
1ST QUARTILE	********	********	********	********	********	********	********
2ND QUARTILE	********	********	********	********	********	********	********
3RD QUARTILE	********	********	********	********	********	********	********
VOL. WGT. MEAN	45.200	1.775	2.175	5.575	30.325	1.8475	0.2100

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SUTTON/CUMULATIVE PRECIP./7011

PERIOD OF REPORT : OCT 8, 86 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	2	2	2	2	2	2	2
MAXIMUM	0.0145	0.609	1.1556	0.3474	0.043	1.142	0.0420
MINIMUM	0.0130	0.105	0.6559	0.1046	0.026	0.913	0.0209
RANGE	0.0015	0.504	0.4998	0.2428	0.017	0.229	0.0211
ARITH. MEAN	0.0137	0.357	0.9057	0.2260	0.035	1.028	0.0315
ARITH. STD. DEV	0.0011	0.356	0.3534	0.1717	0.012	0.162	0.0149
GEOM. MEAN	0.0137	0.252	0.8706	0.1906	0.034	1.021	0.0296
GEOM. STD. DEV.	1.0803	3.475	1.4927	2.3371	1.439	1.171	1.6365
1ST QUARTILE	********	********	********	********	********	********	********
2ND QUARTILE	********	********	********	********	********	********	********
3RD QUARTILE	********	********	********	********	********	********	********
VOL. WGT. MEAN	0.0275	0.713	1.8115	0.4520	0.069	2.055	0.0629

	CADMIUM MG/M**2
# OF SAMPLES	2
MAXIMUM	0.06890
MINIMUN	0.00217
RANGE	0.06672
ARITH. MEAN	0.03554
ARITH. STD. DEV	0.04718
GEOM. MEAN	0.01224
GEOM. STD. DEV.	11.51324
1ST QUARTILE	**********
2ND QUARTILE	**********
3RD QUARTILE	**********
VOL. WGT. MEAN	0.07107

***** : INSUFFICIENT DATA

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TURKEY LAKE/CUMULATIVE PRECIP. 837

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	13	0	13	13	13	13
MAXIMUM	205.0	10.2765	********	577.60	52.920	46.371	14.350
MINIMUM	34.5	0.0157	********	49.84	15.664	3.336	3.204
RANGE	170.5	10.2607	********	527.76	37.256	43.035	11.146
ARITH. MEAN	97.6	3.5208	********	214.64	33.682	17.866	7.518
ARITH. STD. DEV	54.9	2.6925	********	139.51	12.524	12.160	3.276
GEOM. MEAN	84.1	2.0857	********	178.83	31.418	13.751	6.881
GEOM. STD. DEV.	1.8	4.9514	********	1.90	1.489	2.268	1.557
1ST QUARTILE	51.6	1.7311	********	117.54	22.492	5.932	4.915
2ND QUARTILE	81.9	2.8623	********	161.12	29.085	17.655	6.370
3RD QUARTILE	109.0	4.3113	********	247.20	42.999	20.700	9.447
VOL. WGT. MEAN	********	3.5208	********	214.64	33.682	17.866	7.518

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	74.480	7.195	4.100	7.462	67.640	0.8800	1.2300
MINIMUM	11.220	0.660	0.000	0.000	8.910	0.0000	0.0660
RANGE	63.260	6.535	4.100	7.462	58.730	0.8800	1.1640
ARITH. MEAN	35.268	2.840	2.268	3.018	29.956	0.3930	0.3118
ARITH. STD. DEV	17.943	1.844	1.237	1.988	16.518	0.3062	0.2991
GEOM. MEAN	30.689	2.342	2.063	2.604	25.608	0.4271	0.2546
GEOM. STD. DEV.	1.787	1.939	1.622	1.751	1.841	2.1816	2.1191
1ST QUARTILE	20.020	1.565	1.339	1.537	16.709	0.1179	0.1565
2ND QUARTILE	34.530	2.179	2.115	2.530	27.226	0.3346	0.2118
3RD QUARTILE	42.520	3.345	3.060	3.871	38.311	0.5089	0.3172
VOL. WGT. MEAN	35.268	2.840	2.268	3.018	29.956	0.3930	0.3118

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TURKEY LAKE/CUMULATIVE PRECIP. #37

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.0563	1.301	8.1709	0.8272	0.106	10.788	0.1624
MINIMUM	0.0071	0.089	0.7798	0.0784	0.014	0.693	0.0142
RANGE	0.0492	1.212	7.3911	0.7488	0.093	10.095	0.1482
ARITH. MEAN	0.0238	0.545	2.8959	0.2674	0.043	3.225	0.0599
ARITH. STD. DEV	0.0141	0.360	1.9522	0.1937	0.028	2.683	0.0436
GEOM. MEAN	0.0203	0.435	2.3769	0.2214	0.035	2.474	0.0461
GEOM. STD. DEV.	1.8102	2.096	1.9522	1.8655	1.905	2.119	2.1864
1ST QUARTILE	0.0132	0.266	1.4953	0.1437	0.021	1.331	0.0233
2ND QUARTILE	0.0204	0.408	2.5711	0.2101	0.033	2.310	0.0473
3RD QUARTILE	0.0262	0.699	3.4448	0.2782	0.044	3.663	0.0778
VOL. WGT. MEAN	0.0238	0.545	2.8959	0.2674	0.043	3.225	0.0599

	CADMIUM
	MG/M**2
# OF SAMPLES	13
MAXIMUM	0.00615
MINIMUM	0.00071
RANGE	0.00544
ARITH. MEAN	0.00338
ARITH. STD. DEV	0.00181
GEOM. MEAN	0.00283
GEOM. STD. DEV.	1.96421
1ST QUARTILE	0.00188
2ND QUARTILE	0.00324
3RD QUARTILE	0.00428
VOL. WGT. MEAN	0.00338

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : UXBRIDGE/CUMULATIVE PRECIP. #11

PERIOD OF REPORT : JAN 28, 86 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	9	8	0	8	8	8	8
MAXIMUM	131.0	12.8018	********	825.30	115.280	108.730	23.580
MINIMUM	41.5	1.4048	********	73.78	22.372	10.472	5.400
RANGE	89.5	11.3970	********	751.52	92.908	98.258	18.180
ARITH. MEAN	75.6	4.2497	********	270.69	46.321	42.242	14.637
ARITH. STD. DEV	29.8	3.6553	********	241.08	29.334	30.423	6.525
GEOM. MEAN	70.8	3.3866	********	206.18	40.857	34.505	13.186
GEOM. STD. DEV.	1.5	1.9544	********	2.14	1.645	1.983	1.673
1ST QUARTILE	49.4	2.2150	********	116.84	28.777	25.030	8.864
2ND QUARTILE	69.9	3.3059	********	204.42	41.424	34.201	15.588
3RD QUARTILE	78.3	4.3745	********	311.95	46.256	50.136	19.607
VOL. WGT. MEAN	********	4.2417	********	270.18	46.234	42.163	14.610

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANESE MG/M**2
# OF SAMPLES	8	8	8	8	8	8	8
MAXIMUM	86.460	13.755	19.775	16.392	77.290	2.6560	0.7860
MINIMUM	21.580	1.428	0.000	1.012	11.205	0.1130	0.0952
RANGE	64.880	12.327	19.775	15.380	66.085	2.5430	0.6908
ARITH. MEAN	40.317	4.902	4.725	5.886	31.961	0.7139	0.3292
ARITH. STD. DEV	22.212	3.959	6.470	5.009	21.711	0.8113	0.2084
GEOM. MEAN	36.031	3.872	2.816	4.116	26.478	0.4842	0.2810
GEOM. STD. DEV.	1.629	2.048	2.595	2.636	1.925	2.4531	1.8345
1ST QUARTILE	23.676	2.470	1.315	2.202	15.660	0.3432	0.2216
2ND QUARTILE	32.475	3.551	1.919	4.904	26.502	0.4137	0.2630
3RD QUARTILE	51.096	5.995	5.777	7.735	41.435	0.7144	0.3917
VOL. WGT. MEAN	40.241	4.893	4.716	5.875	31.901	0.7126	0.3286

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : UXBRIDGE/CUMULATIVE PRECIP. #11

PERIOD OF REPORT : JAN 28, 86 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	8	8	8	8	8	8	8
MAXIMUM	0.1909	2.092	9.6944	1.0147	0.052	12.512	0.2013
MINIMUM	0.0095	0.133	0.8558	0.0393	0.017	1.521	0.0215
RANGE	0.1814	1.959	8.8386	0.9754	0.036	10.991	0.1798
ARITH. MEAN	0.0539	0.759	3.9373	0.3836	0.032	4.289	0.0803
ARITH. STD. DEV	0.0600	0.705	3.0807	0.3224	0.012	3.486	0.0640
GEOM. MEAN	0.0340	0.540	3.0553	0.2655	0.030	3.504	0.0612
GEOM. STD. DEV.	2.7536	2.397	2.1540	2.7592	1.483	1.883	2.2029
1ST QUARTILE	0.0149	0.397	2.1701	0.1744	0.023	2.421	0.0306
2ND QUARTILE	0.0339	0.422	2.6453	0.2897	0.031	3.387	0.0654
3RD QUARTILE	0.0666	1.104	5.6586	0.5434	0.041	4.332	0.1138
VOL. WGT. MEAN	0.0538	0.758	3.9299	0.3829	0.032	4.281	0.0801

	CADMIUM MG/M**2
# OF SAMPLES	8
MAXIMUM	0.05764
MINIMUM	0.00338
RANGE	0.05427
ARITH. MEAN	0.01698
ARITH. STD. DEV	0.02111
GEOM. MEAN	0.00947
GEOM. STD. DEV.	2.96117
1ST QUARTILE	0.00425
2ND QUARTILE	0.00736
3RD QUARTILE	0.02581
VOL. WGT. MEAN	0.01695

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WATERLOO/CUMULATIVE PRECIP. #07

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	11	0	12	12	12	13
MAXIMUM	135.0	11.4001	********	581.25	72.500	89.100	174.150
MINIMUM	30.0	0.9557	********	69.65	17.114	9.660	5.520
RANGE	105.0	10.4444	********	511.60	55.386	79.440	168.630
ARITH. MEAN	77.9	4.3006	********	287.30	42.853	26.047	27.900
ARITH. STD. DEV	31.1	2.9312	********	149.47	15.405	21.898	44.761
GEOM. MEAN	71.7	3.4530	********	246.01	40.044	20.923	16.766
GEOM. STD. DEV.	1.6	2.0724	********	1.87	1.495	1.900	2.381
1ST QUARTILE	49.4	1.6769	********	158.87	28.800	12.053	10.396
2ND QUARTILE	77.5	3.6815	********	303.78	45.680	18.498	13.450
3RD QUARTILE	89.0	5.6122	********	390.85	50.541	30.554	18.835
VOL. WGT. MEAN	********	4.4528	********	290.46	43.323	26.591	27.900

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	10	12	12	13	12	10	12
MAXIMUM	172.800	10.800	52.650	108.675	79.650	9.1800	0.7760
MINIMUM	6.368	1.610	0.529	0.460	0.440	0.0000	0.0796
RANGE	166.432	9.190	52.121	108.215	79.210	9.1800	0.6964
ARITH. MEAN	54.303	4.628	6.632	13.567	36.388	1.1600	0.2827
ARITH. STD. DEV	45.849	2.678	14.648	29.065	23.215	2.8215	0.2030
GEOM. MEAN	40.610	4.006	2.366	5.169	23.135	0.4395	0.2260
GEOM. STD. DEV.	2.353	1.756	3.520	3.535	4.134	3.3879	2.0299
1ST QUARTILE	25.550	2.384	0.872	2.868	21.948	0.1370	0.1129
2ND QUARTILE	42.877	4.530	2.325	3.947	36.091	0.3423	0.2600
3RD QUARTILE	60.725	5.125	3.306	6.363	53.887	0.3675	0.3258
VOL. WGT. MEAN	54.605	4.725	6.771	13.567	37.149	1.1664	0.2858

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WATERLOO/CUMULATIVE PRECIP. #07

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	12	12	12	12	12	12	12
MAXIMUM	0.1485	2.510	8.1027	1.8540	0.054	4.289	0.6205
MINIMUM	0.0080	0.262	0.7311	0.1054	0.016	0.803	0.0198
RANGE	0.1405	2.247	7.3716	1.7486	0.038	3.486	0.6007
ARITH. MEAN	0.0302	0.703	2.7530	0.5219	0.032	2.443	0.1788
ARITH. STD. DEV	0.0380	0.637	1.9485	0.4850	0.013	1.118	0.2277
GEOM. MEAN	0.0214	0.551	2.2628	0.3838	0.030	2.168	0.0866
GEOM. STD. DEV.	2.1065	1.942	1.9294	2.2178	1.517	1.722	3.4355
1ST QUARTILE	0.0146	0.354	1.6355	0.2271	0.020	1.383	0.0353
2ND QUARTILE	0.0196	0.448	2.4230	0.3636	0.031	2.646	0.0545
3RD QUARTILE	0.0270	0.801	3.4605	0.6702	0.042	3.201	0.2756
VOL. WGT. MEAN	0.0306	0.711	2.7832	0.5276	0.032	2.470	0.1808

	CADMIUM MG/M**2
# OF SAMPLES	12
MAXIMUM	0.08370
MINIMUM	0.00092
RANGE	0.08278
ARITH. MEAN	0.01205
ARITH. STD. DEV	0.02286
GEOM. MEAN	0.00526
GEOM. STD. DEV.	3.37978
1ST QUARTILE	0.00222
2ND QUARTILE	0.00685
3RD QUARTILE	0.00895
VOL. WGT. MEAN	0.01218

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITNEY/CUMULATIVE PRECIP. #19

PERIOD OF REPORT : JAN 2, 86 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	12	0	13	13	13	13
MAXIMUM	123.0	6.0662	********	282.75	48.000	45.440	14.400
MINIMUM	25.0	0.6780	********	35.10	17.050	3.510	2.820
RANGE	98.0	5.3881	********	247.65	30.950	41.930	11.580
ARITH. MEAN	68.9	3.0909	********	153.39	28.761	13.734	7.428
ARITH. STD. DEV	30.9	1.6385	********	74.42	10.310	10.688	3.769
GEOM. MEAN	62.1	2.6565	********	131.58	27.199	11.199	6.563
GEOM. STD. DEV.	1.6	1.8494	********	1.89	1.410	1.898	1.693
1ST QUARTILE	47.5	1.9741	********	95.02	20.170	7.120	4.215
2ND QUARTILE	61.5	2.7087	********	146.55	24.295	10.980	6.440
3RD QUARTILE	79.0	4.6339	********	191.57	31.575	14.430	9.345
VOL. WGT. MEAN	********	3.0398	********	153.39	28.761	13.734	7.428

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	12	13	12	13	12	12	13
MAXIMUM	52.200	8.675	6.090	5.760	36.900	4.5240	0.7350
MINIMUM	5.130	0.270	0.000	0.235	1.680	0.0000	0.0470
RANGE	47.070	8.605	6.090	5.525	35.220	4.5240	0.6880
ARITH. MEAN	25.244	2.448	1.847	2.945	19.031	0.7109	0.2064
ARITH. STD. DEV	14.805	2.295	1.878	1.943	11.729	1.2428	0.2189
GEOM. MEAN	20.723	1.660	1.439	2.207	13.537	0.3909	0.1361
GEOM. STD. DEV.	2.023	2.639	2.409	2.483	2.872	3.3094	2.4607
1ST QUARTILE	11.380	0.852	0.430	1.380	9.475	0.1375	0.0650
2ND QUARTILE	24.025	1.762	1.170	2.117	20.100	0.3080	0.1050
3RD QUARTILE	37.330	2.832	2.737	4.385	28.207	0.7255	0.1810
VOL. WGT. MEAN	24.826	2.448	1.816	2.945	18.716	0.6991	0.2064

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITNEY/CUMULATIVE PRECIP. #19

PERIOD OF REPORT : JAN 2, 86 TO DEC 30,86

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	13	13	13	13	13	12	13
MAXIMUM	0.0540	1.392	6.4224	1.3860	0.049	4.547	0.2403
MINIMUM	0.0050	0.099	0.4744	0.0599	0.010	0.829	0.0197
RANGE	0.0490	1.293	5.9480	1.3261	0.039	3.718	0.2206
ARITH. MEAN	0.0197	0.326	2.3735	0.3186	0.028	1.890	0.0615
ARITH. STD. DEV	0.0133	0.341	1.9264	0.3657	0.012	1.111	0.0582
GEOM. MEAN	0.0165	0.242	1.7633	0.2108	0.026	1.658	0.0476
GEOM. STD. DEV.	1.8528	2.076	2.2595	2.4493	1.632	1.674	1.9825
1ST QUARTILE	0.0113	0.148	0.8521	0.0880	0.020	1.185	0.0294
2ND QUARTILE	0.0145	0.180	1.8015	0.2278	0.027	1.477	0.0409
3RD QUARTILE	0.0219	0.349	2.3638	0.2650	0.032	2.403	0.0622
VOL. WGT. MEAN	0.0197	0.326	2.3735	0.3186	0.028	1.859	0.0615

	CADMIUM
	MG/M**2
# OF SAMPLES	12
MAXIMUM	0.02460
MINIMUM	0.00054
RANGE	0.02406
ARITH. MEAN	0.00438
ARITH. STD. DEV	0.00675
GEOM. MEAN	0.00234
GEOM. STD. DEV.	2.82234
1ST QUARTILE	0.00128
2ND QUARTILE	0.00178
3RD QUARTILE	0.00447
VOL. WGT. MEAN	0.00431

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : JAN 3, 86 TO DEC 30,86 PAGE : 1

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	13	12	0	13	13	13	13
MAXIMUM	160.0	6.5363	********	392.00	54.600	31.920	17.390
MINIMUM	29.0	1.5351	********	56.55	22.330	5.640	4.060
RANGE	131.0	5.0012	********	335.45	32.270	26.280	13.330
ARITH. MEAN	76.3	3.5466	********	200.06	34.000	15.111	9.315
ARITH. STD. DEV	38.8	1.8848	********	109.12	10.426	8.367	4.720
GEOM. MEAN	68.3	3.1268	********	169.44	32.595	13.128	8.294
GEOM. STD. DEV.	1.6	1.6822	********	1.89	1.351	1.744	1.650
1ST QUARTILE	47.5	2.0113	********	106.05	24.080	7.680	5.720
2ND QUARTILE	59.0	2.7276	********	167.90	31.600	11.955	7.195
3RD QUARTILE	87.5	5.3943	********	253.12	39.730	16.975	11.100
VOL. WGT. MEAN	********	3.4734	********	200.06	34.000	15.111	9.315

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	12	13	12	13	12	12	13
MAXIMUM	145.600	7.000	28.000	7.735	106.400	9.5200	0.4200
MINIMUM	7.540	0.420	0.000	0.505	6.235	0.0000	0.0840
RANGE	138.060	6.580	28.000	7.230	100.165	9.5200	0.3360
ARITH. MEAN	33.255	2.418	3.555	3.082	26.910	1.0157	0.1752
ARITH. STD. DEV	37.028	1.905	7.748	2.492	26.438	2.6917	0.1123
GEOM. MEAN	23.394	1.789	1.525	2.233	20.142	0.4431	0.1492
GEOM. STD. DEV.	2.280	2.314	3.127	2.381	2.143	3.9172	1.7629
1ST QUARTILE	10.320	1.030	0.690	0.982	13.650	0.0280	0.0905
2ND QUARTILE	27.445	1.400	1.602	2.335	21.775	0.1325	0.1265
3RD QUARTILE	34.915	3.117	2.067	3.290	28.585	0.6095	0.1755
VOL. WGT. MEAN	32.568	2.418	3.482	3.082	26.355	0.9947	0.1752

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILBERFORCE/CUMULATIVE PRECIP. #18

PERIOD OF REPORT : JAN 3, 86 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	12	12	13
MAXIMUM	0.0570	0.878	4.2269	0.4930	0.281	6.395	0.1772
MINIMUM	0.0084	0.092	0.6804	0.1041	0.014	1.139	0.0189
RANGE	0.0486	0.786	3.5465	0.3889	0.267	5.256	0.1583
ARITH. MEAN	0.0227	0.357	1.9748	0.2270	0.053	2.442	0.0711
ARITH. STD. DEV	0.0138	0.215	1.1301	0.1182	0.074	1.469	0.0449
GEOM. MEAN	0.0195	0.301	1.6971	0.2021	0.035	2.143	0.0593
GEOM. STD. DEV.	1.7742	1.870	1.7836	1.6407	2.236	1.665	1.8914
1ST QUARTILE	0.0117	0.203	1.0459	0.1225	0.021	1.451	0.0357
2ND QUARTILE	0.0175	0.330	1.6751	0.1887	0.029	2.079	0.0559
3RD QUARTILE	0.0285	0.375	2.3397	0.2698	0.048	3.136	0.0881
VOL. WGT. MEAN	0.0227	0.357	1.9748	0.2270	0.052	2.391	0.0711

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.05586
MINIMUM	0.00096
RANGE	0.05490
ARITH. MEAN	0.00832
ARITH. STD. DEV	0.01465
GEOM. MEAN	0.00413
GEOM. STD. DEV.	2.95024
1ST QUARTILE	0.00185
2ND QUARTILE	0.00319
3RD QUARTILE	0.00548
VOL. WGT. MEAN	0.00832

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILKESPORT/CUMULATIVE PRECIP. #04

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	13	13	0	13	13	13	13
MAXIMUM :	176.0	11.1049	********	510.40	73.920	61.600	55.143
MINIMUM :	8.2	0.0637	********	40.59	12.300	12.714	4.830
RANGE :	167.8	11.0412	********	469.81	61.620	48.886	50.313
ARITH. MEAN :	68.8	3.7414	********	253.45	39.524	35.684	19.323
ARITH. STD. DEV :	41.9	2.8695	********	134.23	18.845	16.149	14.470
GEOM. MEAN :	55.9	2.3406	********	213.34	34.805	32.204	15.193
GEOM. STD. DEV. :	2.1	3.8176	********	1.98	1.744	1.624	2.053
1ST QUARTILE :	47.4	1.8205	********	144.90	21.452	22.770	8.771
2ND QUARTILE :	55.3	3.0290	********	229.13	41.400	30.464	11.075
3RD QUARTILE :	81.6	4.7832	********	310.65	48.100	45.550	26.140
VOL. WGT. MEAN :	********	3.7414	********	253.45	39.524	35.684	19.323

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	13	13	12	13	13	13	13
MAXIMUM :	84.992	12.825	9.216	29.799	58.080	1.6750	0.5124
MINIMUM :	9.430	2.445	0.574	0.690	6.970	0.0000	0.0820
RANGE :	75.562	10.380	8.642	29.109	51.110	1.6750	0.4304
ARITH. MEAN :	43.042	6.737	3.295	7.469	30.634	0.6794	0.2851
ARITH. STD. DEV :	26.064	3.422	2.895	9.056	15.255	0.6043	0.1494
GEOM. MEAN :	34.383	5.917	2.375	4.389	26.021	0.5130	0.2448
GEOM. STD. DEV. :	2.146	1.727	2.334	2.880	1.936	2.7695	1.8332
1ST QUARTILE :	20.343	3.525	1.281	2.273	18.485	0.1639	0.1685
2ND QUARTILE :	36.809	6.005	2.412	3.831	29.260	0.3988	0.2096
3RD QUARTILE :	54.500	8.340	3.862	6.736	39.407	0.9871	0.3874
VOL. WGT. MEAN :	43.042	6.737	3.288	7.469	30.634	0.6794	0.2851

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MILKESPORT/CUMULATIVE PRECIP. #04

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	13	13	13	13	13	13	13
MAXIMUM	0.8052	3.627	9.1866	0.7845	0.150	11.595	0.2754
MINIMUM	0.0069	0.278	0.9758	0.0800	0.011	1.078	0.0233
RANGE	0.7983	3.350	8.2108	0.7045	0.139	10.517	0.2520
ARITH. MEAN	0.0865	0.945	3.4779	0.3602	0.044	3.768	0.0845
ARITH. STD. DEV	0.2169	0.946	2.2727	0.1879	0.038	2.711	0.0780
GEOM. MEAN	0.0280	0.688	2.9023	0.3118	0.034	3.125	0.0613
GEOM. STD. DEV.	3.3375	2.152	1.8744	1.8159	2.109	1.866	2.2158
1ST QUARTILE	0.0149	0.388	2.0761	0.2043	0.021	2.165	0.0323
2ND QUARTILE	0.0193	0.533	2.5191	0.3327	0.031	3.072	0.0431
3RD QUARTILE	0.0303	0.895	4.0695	0.4485	0.042	3.901	0.0840
VOL. WGT. MEAN	0.0865	0.945	3.4779	0.3602	0.044	3.768	0.0845

	CADMIUM MG/M**2
# OF SAMPLES	13
MAXIMUM	0.05222
MINIMUM	0.00046
RANGE	0.05176
ARITH. MEAN	0.00951
ARITH. STD. DEV	0.01371
GEOM. MEAN	0.00462
GEOM. STD. DEV.	3.64314
1ST QUARTILE	0.00163
2ND QUARTILE	0.00482
3RD QUARTILE	0.01052
VOL. WGT. MEAN	0.00951

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MINISK/CUMULATIVE PRECIP. 829

PERIOD OF REPORT : JAN 3, 86 TO OCT 7,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	9	6	0	9	9	6	9
MAXIMUM	252.9	6.5489	********	483.64	37.968	235.197	1466.820
MINIMUM	12.1	0.0135	********	9.68	0.605	1.331	3.751
RANGE	240.8	6.5354	********	473.96	37.363	233.866	1463.069
ARITH. MEAN	72.4	1.3646	********	149.35	12.074	54.825	200.855
ARITH. STD. DEV	73.3	2.5630	********	173.34	11.512	76.437	475.808
GEOM. MEAN	50.0	0.2464	********	85.39	6.994	25.182	43.632
GEOM. STD. DEV.	2.5	9.5444	********	3.19	3.667	4.449	5.342
1ST QUARTILE	24.1	0.0254	********	57.81	2.603	17.911	14.342
2ND QUARTILE	43.8	0.3480	********	68.76	9.614	21.131	34.811
3RD QUARTILE	80.3	0.7262	********	90.18	13.138	61.993	70.989
VOL. WGT. MEAN	********	2.4880	********	149.35	12.074	55.427	200.855

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	7	9	8	9	8	8	8
MAXIMUM	55.144	94.837	4.520	551.322	77.710	141.6240	1.7703
MINIMUM	1.815	0.363	0.060	2.238	0.000	0.2135	0.0121
RANGE	53.329	94.474	4.459	549.083	77.710	141.4105	1.7582
ARITH. MEAN	22.192	16.563	2.567	79.788	20.544	18.3542	0.4084
ARITH. STD. DEV	17.239	29.579	1.494	177.392	26.839	49.8103	0.5841
GEOM. MEAN	15.344	6.803	1.585	22.172	8.819	1.2057	0.1744
GEOM. STD. DEV.	2.992	4.252	4.066	4.606	2.887	7.6754	4.5069
1ST QUARTILE	5.211	4.157	1.784	8.682	3.255	0.3861	0.0876
2ND QUARTILE	18.765	6.645	2.566	18.415	10.767	0.7845	0.1426
3RD QUARTILE	26.122	10.229	3.627	34.050	29.298	1.3277	0.5123
VOL. WGT. MEAN	15.484	16.563	3.728	79.787	29.841	18.6566	0.3787

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WINISK/CUMULATIVE PRECIP. #29

PERIOD OF REPORT : JAN 3, 86 TO OCT 7,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	8	8	8	8	8	7	8
MAXIMUM	0.0573	1.607	15.7456	0.5956	0.101	22.306	0.5743
MINIMUM	0.0024	0.094	0.1342	0.0550	0.005	0.553	0.0243
RANGE	0.0548	1.513	15.6114	0.5406	0.096	21.752	0.5501
ARITH. MEAN	0.0258	0.453	3.9519	0.2345	0.032	5.389	0.1174
ARITH. STD. DEV	0.0204	0.518	5.0433	0.1803	0.030	7.619	0.1882
GEOM. MEAN	0.0177	0.288	1.9875	0.1826	0.023	2.904	0.0597
GEOM. STD. DEV.	2.8436	2.628	4.0613	2.1447	2.404	3.149	2.9442
1ST QUARTILE	0.0109	0.135	1.1390	0.1178	0.016	1.038	0.0276
2ND QUARTILE	0.0176	0.262	2.1092	0.1536	0.025	2.214	0.0427
3RD QUARTILE	0.0450	0.565	4.6196	0.3413	0.034	4.455	0.0999
VOL. WGT. MEAN	0.0239	0.420	3.6641	0.2174	0.030	5.030	0.1068

	CADMIUM MG/M**2
# OF SAMPLES	8
MAXIMUM	0.03541
MINIMUM	0.00090
RANGE	0.03451
ARITH. MEAN	0.01202
ARITH. STD. DEV	0.01228
GEOM. MEAN	0.00637
GEOM. STD. DEV.	3.80235
1ST QUARTILE	0.00203
2ND QUARTILE	0.00784
3RD QUARTILE	0.02006
VOL. WGT. MEAN	0.01115

PART VI

SUMMARY STATISTICS OF WET DEPOSITION BY REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	60	57	0	59	59	59	59
MAXIMUM	202.0	12.8018	********	825.30	115.280	108.730	23.580
MINIMUM	29.0	0.2595	********	17.50	4.900	0.000	2.100
RANGE	173.0	12.5424	********	807.80	110.380	108.730	21.480
ARITH. MEAN	76.6	3.6410	********	207.18	36.572	20.849	9.903
ARITH. STD. DEV	39.0	2.1968	********	133.07	15.690	16.370	5.188
GEOM. MEAN	68.8	3.0555	********	169.45	33.552	16.253	8.612
GEOM. STD. DEV.	1.6	1.8909	********	1.97	1.557	1.929	1.727
1ST QUARTILE	48.7	2.0597	********	102.85	25.690	9.150	5.417
2ND QUARTILE	62.6	3.2667	********	189.83	32.702	17.200	8.380
3RD QUARTILE	88.5	4.9375	********	259.67	45.560	27.670	14.040
VOL. MGT. MEAN	********	3.6992	********	207.08	36.555	20.840	9.898

	KJELDAHL AS N MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	56	59	57	59	57	56	58
MAXIMUM	145.600	13.755	28.000	16.392	106.400	9.5200	1.3360
MINIMUM	1.400	0.400	0.000	0.000	2.975	0.0000	0.0290
RANGE	144.200	13.355	28.000	16.392	103.425	9.5200	1.3070
ARITH. MEAN	31.431	3.094	2.613	3.383	26.007	0.6225	0.2298
ARITH. STD. DEV	23.645	2.474	4.466	3.120	18.255	1.4044	0.2020
GEOM. MEAN	24.524	2.339	1.655	2.266	20.821	0.4148	0.1765
GEOM. STD. DEV.	2.156	2.185	2.401	2.567	2.025	2.7364	2.0802
1ST QUARTILE	17.245	1.217	0.800	1.005	13.800	0.0875	0.1095
2ND QUARTILE	27.445	3.000	1.557	2.460	22.637	0.3270	0.1740
3RD QUARTILE	35.925	3.701	2.392	5.595	31.125	0.6095	0.2825
VOL. MGT. MEAN	32.060	3.093	2.655	3.382	26.423	0.6349	0.2305

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES	58	58	57	58	57	57	58
MAXIMUM	0.4270	2.092	9.6944	1.0147	0.281	12.512	0.2013
MINIMUM	0.0058	0.067	0.3781	0.0393	0.012	0.632	0.0118
RANGE	0.4212	2.025	9.3163	0.9754	0.270	11.880	0.1895
ARITH. MEAN	0.0382	0.434	2.4160	0.2606	0.039	2.839	0.0588
ARITH. STD. DEV	0.0636	0.382	1.8157	0.1623	0.041	2.261	0.0481
GEOM. MEAN	0.0225	0.335	1.9016	0.2218	0.030	2.270	0.0445
GEOM. STD. DEV.	2.4365	2.035	2.0265	1.7885	1.818	1.905	2.0941
1ST QUARTILE	0.0116	0.223	1.1634	0.1426	0.021	1.451	0.0241
2ND QUARTILE	0.0173	0.344	1.9176	0.2393	0.025	2.273	0.0411
3RD QUARTILE	0.0335	0.449	2.7951	0.3202	0.036	3.065	0.0678
VOL. WGT. MEAN	0.0384	0.435	2.4748	0.2614	0.038	2.835	0.0590

	CADMIUM MG/M**2
# OF SAMPLES	58
MAXIMUM	0.05764
MINIMUM	0.00058
RANGE	0.05706
ARITH. MEAN	0.00643
ARITH. STD. DEV	0.01129
GEOM. MEAN	0.00332
GEOM. STD. DEV.	2.82559
1ST QUARTILE	0.00149
2ND QUARTILE	0.00323
3RD QUARTILE	0.00608
VOL. WGT. MEAN	0.00644

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 29, 85 TO JAN 5,87

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	117	110	0	115	116	114	115
MAXIMUM	205.0	10.2765	********	577.60	84.000	49.680	61.992
MINIMUM	3.5	0.0079	********	8.23	0.000	0.000	0.735
RANGE	201.5	10.2686	********	569.37	84.000	49.680	61.257
ARITH. MEAN	65.0	2.5307	********	140.99	24.017	11.951	7.434
ARITH. STD. DEV	36.6	1.8333	********	93.30	16.519	9.550	6.949
GEOM. MEAN	54.3	1.7883	********	109.77	18.245	8.685	5.798
GEOM. STD. DEV.	1.9	2.8807	********	2.18	2.234	2.322	1.972
1ST QUARTILE	39.5	1.0338	********	64.90	12.651	6.025	3.624
2ND QUARTILE	61.1	2.2157	********	134.05	20.921	9.905	5.390
3RD QUARTILE	83.7	3.4439	********	186.55	30.940	15.620	9.447
VOL. WGT. MEAN	********	2.4781	********	139.15	23.854	11.782	7.342

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	110	114	114	114	113	110	112
MAXIMUM	183.300	8.675	17.625	41.580	67.640	4.5240	1.9000
MINIMUM	0.455	0.100	0.000	0.000	0.000	0.0000	0.0035
RANGE	182.845	8.775	17.625	41.580	67.640	4.5240	1.8965
ARITH. MEAN	25.329	1.968	2.383	3.310	18.032	0.4987	0.1887
ARITH. STD. DEV	22.415	1.512	2.786	4.593	13.912	0.6476	0.2325
GEOM. MEAN	18.016	1.437	1.576	2.194	11.383	0.4032	0.1246
GEOM. STD. DEV.	2.511	2.399	2.688	2.402	3.208	2.5891	2.4935
1ST QUARTILE	10.750	0.900	0.793	1.100	6.937	0.0900	0.0705
2ND QUARTILE	21.100	1.587	1.702	2.158	15.232	0.3306	0.1250
3RD QUARTILE	36.440	2.764	2.745	3.937	26.890	0.5949	0.2270
VOL. WGT. MEAN	24.965	1.941	2.360	3.265	17.902	0.4915	0.1840

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 29, 85 TO JAN 5,87

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	113	112	112	113	111	111	111
MAXIMUM	0.4280	1.509	90.2000	1.3860	0.120	62.260	0.7744
MINIMUM	0.0010	0.080	0.0680	0.0131	0.001	0.173	0.0078
RANGE	0.4269	1.430	90.1320	1.3729	0.119	62.087	0.7665
ARITH. MEAN	0.0328	0.426	2.7715	0.2329	0.038	2.714	0.0964
ARITH. STD. DEV	0.0502	0.325	8.4700	0.2182	0.020	5.977	0.1381
GEOM. MEAN	0.0199	0.326	1.5528	0.1725	0.024	1.712	0.0571
GEOM. STD. DEV.	2.5113	2.112	2.4300	2.1615	1.968	2.246	2.5702
1ST QUARTILE	0.0111	0.180	0.8961	0.1019	0.018	1.023	0.0300
2ND QUARTILE	0.0168	0.329	1.6265	0.1694	0.026	1.509	0.0498
3RD QUARTILE	0.0329	0.533	2.7769	0.2703	0.035	2.798	0.0922
VOL. WGT. MEAN	0.0320	0.416	2.7026	0.2272	0.029	2.642	0.0940

	CADMIUM
	MG/M**2
# OF SAMPLES	110
MAXIMUM	0.04284
MINIMUM	0.00035
RANGE	0.04249
ARITH. MEAN	0.00457
ARITH. STD. DEV	0.00608
GEOM. MEAN	0.00277
GEOM. STD. DEV.	2.56457
1ST QUARTILE	0.00138
2ND QUARTILE	0.00215
3RD QUARTILE	0.00552
VOL. WGT. MEAN	0.00445

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 85 TO JAN 1,87

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	100	89	0	99	99	96	96
MAXIMUM :	252.9	6.5489	********	483.64	46.332	235.197	1466.820
MINIMUM :	4.3	0.0071	********	4.52	0.000	0.602	0.966
RANGE :	248.6	6.5418	********	479.12	46.332	234.595	1465.854
ARITH. MEAN :	53.0	0.8022	********	72.16	11.728	14.075	23.584
ARITH. STD. DEV :	38.9	0.9809	********	77.67	9.233	25.339	149.551
GEOM. MEAN :	41.4	0.4339	********	47.92	8.782	8.144	5.187
GEOM. STD. DEV. :	2.1	3.7377	********	2.48	2.135	2.765	2.875
1ST QUARTILE :	26.1	0.2551	********	25.24	5.522	4.327	2.548
2ND QUARTILE :	43.9	0.5655	********	48.00	8.979	8.121	4.257
3RD QUARTILE :	68.9	0.8931	********	89.25	14.040	18.043	7.920
VOL. WGT. MEAN :	********	0.8461	********	71.64	11.644	13.905	23.286

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	85	97	94	97	94	88	93
MAXIMUM :	79.632	94.837	16.631	551.322	77.710	141.6240	1.7703
MINIMUM :	1.505	0.086	0.000	0.000	0.000	0.0000	0.0086
RANGE :	78.127	94.751	16.631	551.322	77.710	141.6240	1.7617
ARITH. MEAN :	17.870	3.116	1.858	10.185	12.302	2.0741	0.1921
ARITH. STD. DEV :	15.736	9.669	2.585	56.006	14.827	15.0553	0.2463
GEOM. MEAN :	12.354	1.412	1.065	2.552	5.673	0.5351	0.1104
GEOM. STD. DEV. :	2.480	3.010	3.156	3.220	4.366	2.4671	2.9362
1ST QUARTILE :	6.554	0.739	0.303	1.267	2.861	0.1610	0.0495
2ND QUARTILE :	14.402	1.346	1.042	2.334	8.032	0.3475	0.1091
3RD QUARTILE :	21.680	3.220	2.407	3.907	15.053	0.6563	0.2730
VOL. WGT. MEAN :	18.597	3.064	1.951	10.132	12.954	2.0612	0.1855

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 85 TO JAN 1,87

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES	94	93	93	93	94	92	90
MAXIMUM	0.1134	2.203	15.7456	1.0769	0.101	22.306	1.5373
MINIMUM	0.0016	0.056	0.1342	0.0326	0.002	0.432	0.0095
RANGE	0.1118	2.147	15.6114	1.0443	0.099	21.874	1.5278
ARITH. MEAN	0.0173	0.350	2.1344	0.2173	0.022	2.387	0.0951
ARITH. STD. DEV	0.0167	0.384	2.4717	0.2068	0.016	2.877	0.1898
GEOM. MEAN	0.0126	0.238	1.3856	0.1582	0.017	1.676	0.0482
GEOM. STD. DEV.	2.2280	2.286	2.5132	2.1432	2.091	2.165	2.6950
1ST QUARTILE	0.0067	0.121	0.7104	0.0903	0.011	0.898	0.0231
2ND QUARTILE	0.0127	0.207	1.3158	0.1397	0.019	1.591	0.0385
3RD QUARTILE	0.0199	0.382	2.5786	0.2504	0.028	2.654	0.0716
VOL. WGT. MEAN	0.0168	0.335	2.0440	0.2081	0.021	2.298	0.0915

	CADMIUM
	MG/M**2
# OF SAMPLES	94
MAXIMUM	0.07638
MINIMUM	0.00000
RANGE	0.07638
ARITH. MEAN	0.00523
ARITH. STD. DEV	0.01022
GEOM. MEAN	0.00246
GEOM. STD. DEV.	3.23485
1ST QUARTILE	0.00107
2ND QUARTILE	0.00182
3RD QUARTILE	0.00429
VOL. WGT. MEAN	0.00506

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES	52	49	0	50	50	50	48
MAXIMUM	142.8	10.2181	********	552.27	66.490	59.340	26.400
MINIMUM	26.0	0.8752	********	32.40	12.420	3.240	3.120
RANGE	116.8	9.3429	********	519.87	54.070	56.100	23.280
ARITH. MEAN	70.0	3.2478	********	192.51	30.761	17.503	9.767
ARITH. STD. DEV	33.5	2.1585	********	130.48	12.494	12.035	4.942
GEOM. MEAN	62.9	2.6923	********	151.40	28.380	13.998	8.697
GEOM. STD. DEV.	1.6	1.8355	********	2.06	1.506	1.992	1.630
1ST QUARTILE	46.0	1.6292	********	90.73	19.910	7.985	6.275
2ND QUARTILE	66.5	2.4427	********	153.92	30.830	14.465	8.965
3RD QUARTILE	85.0	3.9592	********	267.15	38.800	25.440	11.900
VOL. WGT. MEAN	********	3.1828	********	189.74	30.319	17.252	9.584

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES	47	47	49	50	47	47	50
MAXIMUM	62.040	34.545	14.440	18.240	52.533	2.4444	0.9506
MINIMUM	2.700	0.330	0.000	0.000	1.820	0.0000	0.0350
RANGE	59.340	34.215	14.440	18.240	50.713	2.4444	0.9156
ARITH. MEAN	26.286	5.213	2.362	3.686	20.331	0.4949	0.2189
ARITH. STD. DEV	16.686	7.437	2.552	3.191	14.409	0.4577	0.1790
GEOM. MEAN	20.430	2.625	1.662	2.812	14.806	0.3932	0.1663
GEOM. STD. DEV.	2.204	3.131	2.468	2.096	2.424	2.2377	2.1049
1ST QUARTILE	12.540	1.282	0.690	1.650	7.560	0.1810	0.0895
2ND QUARTILE	21.110	2.226	1.587	3.060	15.730	0.3875	0.1419
3RD QUARTILE	40.630	5.420	2.987	4.738	31.100	0.5985	0.2969
VOL. WGT. MEAN	25.450	5.047	2.314	3.633	19.684	0.4791	0.2157

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

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ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 85 TO DEC 30,86

	NICKEL MG/M**2	ZINC MG/M**2	IRON MG/M**2	LEAD MG/M**2	VANADIUM MG/M**2	ALUMINUM MG/M**2	COPPER MG/M**2
# OF SAMPLES :	50	50	50	50	50	50	50
MAXIMUM :	0.0969	1.469	5.1360	0.8439	0.068	3.800	0.6197
MINIMUM :	0.0066	0.087	0.3966	0.0437	0.010	0.621	0.0127
RANGE :	0.0903	1.382	4.7394	0.8002	0.058	3.179	0.6070
ARITH. MEAN :	0.0198	0.408	1.5373	0.2762	0.030	1.634	0.0868
ARITH. STD. DEV :	0.0141	0.250	0.8859	0.1780	0.014	0.702	0.1015
GEOM. MEAN :	0.0170	0.351	1.3326	0.2284	0.027	1.493	0.0575
GEOM. STD. DEV. :	1.6670	1.742	1.7131	1.8818	1.608	1.545	2.4037
1ST QUARTILE :	0.0134	0.217	0.8979	0.1475	0.019	1.068	0.0293
2ND QUARTILE :	0.0158	0.387	1.2722	0.2133	0.028	1.562	0.0542
3RD QUARTILE :	0.0240	0.451	1.9221	0.3460	0.036	2.069	0.0976
VOL. WGT. MEAN :	0.0195	0.402	1.5152	0.2722	0.030	1.611	0.0855

	CADMIUM MG/M**2
# OF SAMPLES :	49
MAXIMUM :	0.01050
MINIMUM :	0.00066
RANGE :	0.00984
ARITH. MEAN :	0.00341
ARITH. STD. DEV :	0.00259
GEOM. MEAN :	0.00263
GEOM. STD. DEV. :	2.07974
1ST QUARTILE :	0.00155
2ND QUARTILE :	0.00262
3RD QUARTILE :	0.00428
VOL. WGT. MEAN :	0.00337

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 85 TO DEC 31,86

	PRECIP. MM	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2	CHLORIDE MG/M**2
# OF SAMPLES :	115	110	0	112	112	111	114
MAXIMUM :	283.2	15.5630	********	892.08	103.600	89.100	174.150
MINIMUM :	8.2	0.0637	********	20.00	5.600	4.672	2.380
RANGE :	275.0	15.4994	********	872.08	98.000	84.428	171.770
ARITH. MEAN :	75.4	4.2113	********	253.16	39.636	25.508	16.447
ARITH. STD. DEV :	47.7	2.8927	********	161.05	18.484	15.401	18.234
GEOM. MEAN :	63.6	3.2014	********	205.45	35.027	21.440	12.530
GEOM. STD. DEV. :	1.8	2.3729	********	1.99	1.704	1.842	1.992
1ST QUARTILE :	45.0	2.1789	********	133.07	26.480	15.615	8.237
2ND QUARTILE :	69.1	3.6837	********	223.58	38.815	21.370	12.409
3RD QUARTILE :	90.0	5.3629	********	335.95	51.016	31.475	16.525
VOL. WGT. MEAN :	********	4.1875	********	252.63	39.553	25.308	16.445

	KJELDAHL AS N MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2	PHOSPHOR MG/M**2	MANGANSE MG/M**2
# OF SAMPLES :	108	112	109	113	112	109	110
MAXIMUM :	197.640	18.275	52.650	108.675	161.040	17.7510	1.9800
MINIMUM :	4.080	0.836	0.082	0.418	0.440	0.0000	0.0328
RANGE :	193.560	17.439	52.568	108.257	160.600	17.7510	1.9472
ARITH. MEAN :	43.690	4.576	3.357	5.979	32.637	0.8615	0.2595
ARITH. STD. DEV :	35.074	2.913	5.748	11.326	23.721	2.3296	0.2284
GEOM. MEAN :	32.929	3.786	1.942	3.394	24.610	0.4990	0.2003
GEOM. STD. DEV. :	2.197	1.891	2.717	2.691	2.371	2.8638	2.0681
1ST QUARTILE :	20.858	2.435	1.145	1.791	17.497	0.0815	0.1337
2ND QUARTILE :	36.180	4.137	1.805	3.626	27.137	0.3088	0.2050
3RD QUARTILE :	56.474	5.865	3.465	5.452	40.602	0.5915	0.3174
VOL. WGT. MEAN :	43.267	4.568	3.330	5.953	32.518	0.8585	0.2595

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/CUMULATIVE PRECIP.

PERIOD OF REPORT : DEC 31, 85 TO DEC 31,86

	NICKEL	ZINC	IRON	LEAD	VANADIUM	ALUMINUM	COPPER
	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2	MG/M**2
# OF SAMPLES :	109	110	110	110	110	108	109
MAXIMUM :	0.8052	4.097	13.4253	2.7657	0.150	27.237	0.7511
MINIMUM :	0.0033	0.123	0.4553	0.0425	0.007	0.464	0.0097
RANGE :	0.8019	3.975	12.9700	2.7232	0.144	26.773	0.7414
ARITH. MEAN :	0.0486	0.732	2.7785	0.4238	0.035	3.031	0.1002
ARITH. STD. DEV :	0.1036	0.668	2.3572	0.4194	0.025	3.084	0.1356
GEOM. MEAN :	0.0222	0.552	2.1465	0.3028	0.029	2.325	0.0600
GEOM. STD. DEV. :	2.8109	2.062	2.0302	2.2370	1.869	2.020	2.5389
1ST QUARTILE :	0.0118	0.328	1.2409	0.1589	0.019	1.497	0.0297
2ND QUARTILE :	0.0180	0.522	2.3060	0.3139	0.030	2.499	0.0519
3RD QUARTILE :	0.0310	0.875	3.4004	0.4950	0.039	3.725	0.0938
VOL. WGT. MEAN :	0.0483	0.732	2.7785	0.4238	0.035	3.001	0.1002

	CADMIUM
	MG/M**2
# OF SAMPLES :	110
MAXIMUM :	0.08370
MINIMUM :	0.00034
RANGE :	0.08336
ARITH. MEAN :	0.00696
ARITH. STD. DEV :	0.01074
GEOM. MEAN :	0.00378
GEOM. STD. DEV. :	3.00093
1ST QUARTILE :	0.00170
2ND QUARTILE :	0.00447
3RD QUARTILE :	0.00774
VOL. WGT. MEAN :	0.00696